# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
Connect America Fund	)	WC Docket No. 10-90
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
Establishing Just and Reasonable Rates for Local Exchange Carriers	)	WC Docket No. 07-135
High-Cost Universal Service Support	)	WC Docket No. 05-337
Developing an Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
Lifeline and Link-Up	)	WC Docket No. 03-109

### COMMENTS of UNITED STATES CELLULAR CORPORATION

Grant B. Spellmeyer David A. LaFuria Senior Director - Legislative & John Cimko Regulatory Affairs

UNITED STATES CELLULAR CORPORATION

8410 West Bryn Mawr

Chicago, Illinois 60631

(773) 399-4280

LUKAS, NACE, GUTIERREZ & SACHS, LLP

8300 Greensboro Drive, Suite 1200

McLean, Virginia 22102

(703) 584-8678

# TABLE OF CONTENTS

SUMM	IARY		v
I.	IN	FRODUCTION	2
II.	BR	INGING MOBILE BROADBAND TO RURAL AMERICA	3
	A.	Several Commission Proposals Would Fail To Advance Its Goal of Facilitating and Accelerating Mobile Broadband Deployment in Rural Areas.	7
	B.	The Door Is Still Open for the Commission To Make More Productive Choices in Designing New Universal Support Mechanisms for Broadband.	9
III.		VIVING THE COMMISSION'S PRINCIPLE OF COMPETITIVE UTRALITY.	11
	A.	The Commission Is Misguided in Claiming That Its Proposals To Support Broadband Are Competitively Neutral.	12
		1. The Commission Affirms Competitive Neutrality, But Its Proposals Lose Sight of the Principle in Critical Respects	12
		2. The Proposal To Phase Down the Competitive ETC Interim Cap Is Not Competitively Neutral.	13
		3. The Proposal To Redistribute Phased-Down Competitive ETC Support Is Not Competitively Neutral.	15
	B.	The Advancement of Mobile Broadband Deployment Should Be Established by the Commission as an Independent Priority.	18
	C.	The Commission Could Advance Competitive Neutrality by Adopting U.S. Cellular's Proposal for Two Separate Connect America Fund Mechanisms for Fixed and Mobile Broadband Services.	20
IV.		E COMMISSION SHOULD AVOID ACTIONS THAT EXCEED ITS ONGRESSIONALLY DELEGATED AUTHORITY	21
	A.	The Commission Lacks Statutory Authority To Adopt Reverse Auctions	21
	B.	The Proposed Use of Census Blocks As Service Areas for Universal Service Support Would Not Be Consistent with the Communications Act of 1934	27
	C.	Before Adopting Broadband as a Supported Service, the Commission Must First Seek and Accept the Recommendation of the Federal-State Joint Board	28
V.	ΑÜ	E COMMISSION SHOULD USE A COST MODEL INSTEAD OF A REVERSE ICTION MECHANISM TO DISBURSE CONNECT AMERICA FUND PPORT.	20
	$\mathcal{S}$	1 1 VIXI	~/

	A.		en If the Commission Had Legal Authority To Establish a Reverse Auction echanism, Policy Concerns Demonstrate the Need To Steer a Different Course 2	29
		1.	Using Reverse Auctions To Disburse Connect America Fund Support Would Not Be a Prudent Policy.	30
		2.	The Commission Should Not Experiment with Reverse Auction Mechanisms for Phase I Connect America Fund Support, Nor Should It Bar Funding to Highest-Cost Areas.	34
	B.	Ser	he Commission Adopts a Separate Ongoing Support Mechanism for Mobile vices, the Commission Should Not Use Reverse Auctions To Determine pport	37
	C.	De	tead of Using a Reverse Auction Mechanism, the Commission Should velop and Adopt a Cost Model for Use in Disbursing Connect America Fund pport	39
√I.	CO AC BR	MM COU	C INTEREST BROADBAND OBLIGATIONS ADOPTED BY THE IISSION SHOULD TAKE CUSTOMER PREFERENCES INTO UNT, SHOULD REFLECT THE CHARACTERISTICS OF MOBILE DBAND NETWORKS, AND SHOULD AVOID PLACING IRRANTED BURDENS ON FUNDING RECIPIENTS	<b>‡</b> 1
	A.		e Commission Should Adopt Annual Certification Requirements To Ensure mpliance with Public Interest Broadband Obligations	12
	B.	Res	e Commission Should Adopt Realistic Broadband Service Metrics That Are sponsive to Consumers' Usage Characteristics and Speed Demands, and That oid Imposing Undue Burdens on Funding Recipients	13
		1.	The Commission Should Set an Initial Target Speed of 4 Mbps (Download) and 1 Mbps (Upload) for Universal Service, and Should Establish Mobility as a Separate Broadband Metric.	13
		2.	The Commission Should Not Require Funding Recipients To Engage in Periodic Testing of Their Broadband Networks	ŀ6
		3.	The Commission Should Use Speed Measurement Criteria That Account for the Unique Characteristics of Mobile Broadband Networks	<b>!</b> 7
	C.	Co	e Commission's Requirements Regarding Affordable and Reasonably mparable Rates Should Avoid Direct Rate Requirements Imposed on Funding cipients, and Should Take Consumers' Preferences into Account	<b>1</b> 9
		1.	The Commission Should Follow the Model It Has Used for Voice Services in Determining the Affordability of Broadband Services.	19
		2.	The Commission Should Adopt an Aggressive Standard for Broadband Rate Comparability, and Should Take Both Rates and Services into Account	52
	D.		nd Recipients Should Be Permitted To Partner with Other Providers To Meet quirements Related to the Provision of Voice Services.	55

REFORMS THAT PROMOTE EFFICIENCY AND COMPETITIVE NEUTRALITY			55		
	A.	The Commission Should Rationalize Competitive ETC Support in a Manner That Accounts for the Accelerating Demand for Mobile Broadband in Rural Areas	56		
		Phased-Down Competitive ETC Support Should Not Be Used To Reduce the Overall Level of High-Cost Support.	56		
		2. Competitive ETCs Should Be Permitted To Immediately Invest Existing Support in Mobile Broadband Infrastructure.	58		
		3. Support to Competitive ETCs Should Not Be Phased Down Before a Successor Funding Mechanism Is in Place.	59		
		4. All Support Provided Under Existing Mechanisms Should Be Phased Down on Identical Time Lines.	60		
		5. The Commission Should Not Accelerate the Phase-Down of Competitive ETC Support by Treating a Wireless Family Plan as a Single Line for Purposes of Support Calculations	62		
	B.	The Commission Should Gradually Transition Interstate Access Support to the Connect America Fund.	64		
VIII.	SH	RULES FOR THE FIRST PHASE OF THE CONNECT AMERICA FUND SHOULD PROVIDE SUFFICIENT LEVELS OF FUNDING, AND SHOULD DEVELOP EFFECTIVE MEASURES FOR TARGETING SUPPORT			
	A.	If the Commission Sets a Budget for Funding for the First Phase of the Connect America Fund, the Budget Should Be Flexible and Subject to Upward Adjustment	66		
	В.	Phase I Connect America Fund Support Should Be Made Available for Pre- Existing Deployment Plans in Certain Cases.	67		
	C.	The Commission Should Establish Simple and Practical Criteria for Designating Geographic Areas That Will Receive Phase I Connect America Fund Support	69		
	D.	Rural Carriers Should Be Required To Disaggregate Support Within Existing Study Areas	70		
	E.	The Commission Should Begin the Process of Redrawing Existing Study Areas To Create More Narrowly Targeted Service Areas for Purposes of Connect America Fund Support	72		
IX.	AN	E COMMISSION'S PROPOSED LONG-TERM VISION FOR THE CONNECT MERICA FUND IS FLAWED BY A MYOPIC RETREAT FROM DMPETITIVE NEUTRALITY	75		
	A.	The Commission's Proposal To Fund Only One Broadband Provider in a Geographic Area Is a Throwback to the Days of Regulated Monopolies			

	В.	The Commission's Proposal To Cap the Phase II Connect America Fund Support Mechanism Would Undermine the Achievement of Universal Service Goals.	. 78
	C.	Instead of Choosing Between the Less Problematic of Two Flawed Options for Distributing Phase II Connect America Fund Support, the Commission Should	
		Rely on a Cost Model.	. 83
X.	CO	NCLUSION	. 84

#### **SUMMARY**

U.S. Cellular is pleased to have the opportunity to participate in the Commission's rule-making aimed at reforming and modernizing universal service rules and policies that have outlived their relevance and effectiveness in today's broadband world. While U.S. Cellular supports many of the proposals and initiatives reflected in the *Notice*, it also has substantial concerns regarding critical aspects of the Commission's plan. These are summarized in the following sections.

#### PRINCIPAL CONCERNS

U.S. Cellular has two principal concerns with the Commission's universal service reform proposals. The first is that, although the Commission acknowledges in the *Notice* the growing importance of mobile broadband networks because of the opportunities they provide for economic growth and improvements in our quality of life, several of the Commission's key proposals would make it difficult to realize these opportunities. The proposals would in fact impair the deployment of mobile broadband networks in rural and high-cost areas. Without a long-term plan to ensure that support is sufficient to provide rural areas with access to high-quality mobile broadband service, carriers will not invest in any area that does not offer a return on investment.

The second concern is that the Commission, in developing its Connect America Fund proposals, has paid little attention to its principle of competitive neutrality. While the Commission makes a general assertion in the *Notice* that its proposal to support broadband is competitively neutral, many of its key proposals conflict with the Commission's longstanding commitment to establish and manage universal service support mechanisms in a competitively neutral manner.

U.S. Cellular has previously proposed that two separate CAF funds should be established, one for fixed broadband, and one for mobile broadband, with support structured in a manner that would adjust the current imbalance in funding for fixed and mobile networks. The appropriate goal should be to ensure that support is sufficient to provide rural citizens with access to *both* fixed and mobile broadband services. Adopting U.S. Cellular's proposal would further President Obama's goal to invest in the next generation of high-speed wireless coverage for 98 percent of Americans, and would also ensure that CAF funding mechanisms are competitively neutral.

U.S. Cellular highlights these two principal concerns, and summarizes other issues raised in its Comments, in the following paragraphs.

#### THE COMMISSION MUST ACT WITHIN ITS DELEGATED AUTHORITY

A central component of the Commission's effort to reform its universal service system is its proposal to treat broadband as a supported service pursuant to Section 254 of the Communications Act of 1934. This proposal is seriously flawed, however, because the Commission is attempting to proceed with adding broadband to the list of supported services without first having requested a recommended decision from the Federal-State Joint Board on Universal Service. U.S. Cellular urges the Commission to commence a Joint Board proceeding to determine whether the tests for defining broadband as a supported service pursuant to Section 254(c)(1) have been met, and to advise the Commission regarding how best to support broadband consistent with Title II of the Act.

In addition, the Commission lacks statutory authority to adopt a single-winner reverse auction mechanism because such a mechanism would not comport with the mandate of the Telecommunications Act of 1996 to promote local competition, it would require extensive regulation

(contrary to the Commission's claims), and it would not be consistent with principles established in Section 254(b) of the Act.

#### REVERSE AUCTION MECHANISM

Even if the Commission had statutory authority to adopt a reverse auction mechanism, which is untested as a means of disbursing universal service support, there are numerous policy reasons supporting the view that it should not do so. For example, reverse auctions would install a dominant service provider in areas receiving support, would impede competitive entry, would create anti-consumer and anti-competitive incentives that would require Commission oversight and enforcement, and would not be effective in promoting private investment in broadband.

For these reasons, U.S. Cellular encourages the Commission to rely on a forward-looking cost model, rather than a reverse auction mechanism, for the disbursement of CAF support. The Commission proposes in the *Notice* to use such a cost model to provide support to rural incumbent local exchange carriers in certain circumstances, and U.S. Cellular suggests that the Commission's proposed use of a cost model should be expanded to encompass all CAF support disbursements.

#### THE PATH TO REFORM

Broadband Service Metrics.—U.S. Cellular supports establishing 4 Mbps (download) and 1 Mbps (upload) as the initial broadband speed threshold. This would be the best means of meeting National Broadband Plan goals for providing broadband access to everyone in the United States. This speed threshold should be used as a proxy for defining other broadband capabilities, except that mobility should be defined as a separate broadband metric.

U.S. Cellular opposes any rule that would require eligible telecommunications carriers to periodically test their broadband networks to measure compliance with performance metrics, and

also favors the use of speed measurement criteria that reflect the unique characteristics of mobile broadband networks, including the fact that network capacity per user typically changes over time as the number of users in a given network sector increases and decreases.

Reasonably Comparable Rates and Services.—It is critically important that the Commission develop universal service reforms that are successful in bringing affordable broadband to rural and high-cost areas throughout America. An effective way to accomplish this would be to establish a national rate benchmark based on average urban rates (an approach that could be based on the Commission's current mechanisms for providing high-cost support to non-rural carriers). U.S. Cellular suggests that the Commission should adopt a benchmark of not more than 125 percent of nationwide urban rates. The Commission also should apply the statutory principle of reasonable comparability to services as well as rates, since doing so would help to ensure that consumers in rural and high-cost areas have access to broadband services (including mobile broadband services) that are comparable to those available in urban areas.

The Commission also seeks comment on the methods it should use to assess whether rates for supported services are affordable, and U.S. Cellular recommends that the Commission could rely on subscribership penetration rates for fixed and mobile broadband services as a basis for evaluating the affordability of broadband, and should also measure trends in the level of average consumer expenditures for fixed and mobile broadband services, as a further indicator of affordability.

#### NEAR-TERM REFORMS

Support for Rural Incumbents.—U.S. Cellular favors a gradual transition of Interstate Access Support funding to the new CAF mechanisms. The transition should not begin until the Commission is prepared to commence the disbursement of support from these new mechanisms,

and the transition should then proceed gradually at a pace that is coordinated with the ramp up of CAF funding.

Support for Competitive ETCs.—Competitive ETCs' existing high-cost support should not be phased down by the Commission until replacement funding mechanisms have been adopted and have been made operational. Phasing down existing support without fully implementing replacement mechanisms would have the same effect on competitive ETCs as a "flash cut" reduction in their support, because their ability to continue using support to deploy infrastructure and provide services would be disrupted.

The Commission also should ensure that support currently received by competitive ETCs not be phased down unless the Commission also phases down support for rural incumbent LECs. Whatever phase-down period is adopted must be the same for all participants. Such an approach would be consistent with the Commission's principle of competitive neutrality. In transitioning to CAF, U.S. Cellular supports a phase-down period for wireless carriers of ten years, with comparable phase-down periods applied with respect to any measures designed to transition rural incumbent LECs to the Commission's new USF mechanisms.

For example, U.S. Cellular has suggested a gradual transition of the existing IAS funding mechanism into the new CAF support mechanisms. Applying a ten-year period for transitioning IAS to CAF would be an appropriate glide path that would minimize disruptions that could be caused by a more accelerated transition.

In addition, any phase down of competitive ETC funding that occurs during the first phase of CAF implementation should not be used to reduce the overall size of the Universal Service Fund. Although U.S. Cellular supports the Commission's commitment to fiscal responsibility, this commitment must be balanced against the need to ensure that support mechanisms are

sufficient to achieve the statutory goals for universal service. Using phased-down competitive ETC support to reduce the size of the Fund would risk sidetracking the Commission's objectives to modernize and refocus USF to make affordable broadband available to all Americans, and to accelerate the transition from circuit-switched to IP networks.

Further, a useful near-term step the Commission should take to promote broadband deployment is to clarify and confirm that ETCs are permitted under existing law to use their current high-cost support to deploy joint-use networks capable of providing both voice and broadband services.

Finally, the Commission should reject any suggestion that the phase down of competitive ETC support should be accelerated by immediately treating a wireless family plan as a single line for purposes of support calculations. This would amount to a flash-cut reduction in competitive ETC support, would not be competitively neutral, and would conflict with the Commission's commitment to design mechanisms to accelerate mobile broadband deployment..

#### THE FIRST PHASE OF CAF

Funding Cap.—U.S. Cellular opposes the use of a reverse auction mechanism, and therefore also objects to the Commission's proposal to use the first phase of the transition to CAF to test the proposed auction mechanism. If the Commission, however, decides to proceed with its plans for Phase I, then the Commission should not impose a rigid budget for the level of Phase I disbursements, but instead should establish a flexible budget that could be adjusted to accommodate the Commission's own concerns regarding the high costs that would be required to ensure ubiquitous mobile coverage and very-high-speed broadband for every American.

Funding Pre-Existing Deployment Plans.—U.S. Cellular opposes the Commission's proposal to limit Phase I CAF funding to new, or incremental, capacity or deployment to which

an ETC has not already committed. Many such commitments have been made pursuant to five-year plans submitted to states or to the Commission in connection with ETC designations. In some cases, the interim cap on competitive ETCs' high-cost support has interfered with the ability of wireless carriers to meet these commitments. This problem should not be compounded by making these deployment projects ineligible for Phase I CAF support. If the Commission, however, does take this approach, then U.S. Cellular suggests that the Commission should make an exception to this limitation to take into account, and reduce the impact of, the effects of the interim cap on competitive ETCs' high-cost support.

Areas Eligible for Phase I CAF Support.—U.S. Cellular supports the use of unserved housing units as the basis for determining the baseline number of unserved units in an area receiving support, since this would work as a reasonable surrogate for population. U.S. Cellular also suggests that the Commission should not expand this measurement to include elements such as businesses or community anchor institutions. U.S. Cellular is also concerned that the Commission's proposal to use census blocks as the basis for bidder-defined service areas receiving CAF support would not be consistent with Section 214(e)(5) of the Communications Act.

U.S. Cellular supports the Commission's proposal to require rural carriers to disaggregate support within their existing study areas beginning in 2012, since this would be an effective means of targeting support more directly to the areas with greatest need. Disaggregation would give incentives to wireless carriers to deploy networks increase their level of service in areas with the highest costs that are most in need of additional facilities.

The Commission also should begin a process in the near term to redraw incumbent LECs' study areas for purposes of determining eligibility for support in the second phase of CAF, since this would benefit rural consumers by more narrowly targeting support to areas with the highest

costs. If the Commission decides to initiate such a process, then all current ETCs should be required to reapply for ETC designations for the new study areas. Finally, there would not be any reasonable basis, in U.S. Cellular's view, for the Commission to carve out of study areas receiving support those portions in which unsubsidized competition is present, since there is no evidence that doing so would advance universal service or competitive goals.

#### CAF IN THE LONGER TERM

Funding Only One Provider in a Service Area.—U.S. Cellular opposes the Broadband Plan recommendation that there should be not more than one subsidized service provider in a service area. This approach would conflict with the judicial interpretation that universal service support mechanisms, in order to comply with the Communications Act, must not only be sufficient to preserve and advance universal service, but also must be competitively neutral. In addition, there is little basis for the view that the recommended approach is necessary to advance the Commission's universal service goals. In fact, providing support that is sufficient to ensure that rural areas have access to both fixed and mobile voice and broadband networks will foster better network quality for rural consumers and stimulate innovation in rural areas that would not otherwise occur.

Capping Overall Support in Phase II of CAF.—The Commission should not adopt its proposal to cap ongoing support in the second phase of CAF at annual amounts equal to the size of the current high-cost program in 2010. In Section 254(b)(3) of the Communications Act, Congress directed that the Commission should ensure that support is sufficient to ensure that rural consumers have access to advanced information and telecommunications services that are reasonably comparable to those available in urban areas. A cap which results in insufficient support being provided to disseminate the supported services violates the Act. Instead of imposing a cap,

the Commission should act on universal service contribution reform. Given that the cap would be in direct conflict with President Obama's commitment to spur the deployment of mobile broadband networks, the Commission should reject any up-front imposition of a funding cap, in favor of relying on its overall reform proposals to control costs and thereby control the contribution burden borne by consumers.

The "Competitive Bidding Everywhere" Proposal.—The Commission seeks comment on two long-term approaches to CAF funding: use reverse auctions for all funding, or offer the "carrier of last resort" in each service area a "right of first refusal" to be the sole provider of both voice and broadband in that area, for a specified amount of ongoing support.

As a general matter, U.S. Cellular opposes any use of reverse auction mechanisms for the disbursement of CAF support, believing instead that a forward-looking economic cost model would better serve consumers by driving the efficient use of CAF support. Of the two funding approaches proposed by the Commission, the ROFR mechanism is the greater of two evils. The ROFR option would not be market-driven, and would shut off access to universal service support for mobile broadband service providers in service areas that would become the exclusive territory of rural incumbent LECs that choose the ROFR option. Use of a forward-looking cost model is the better alternative as it will deliver far more benefits to rural areas, in a far more efficient manner.

## Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)
Connect America Fund	) WC Docket No. 10-90
A National Broadband Plan for Our Future	) GN Docket No. 09-51
Establishing Just and Reasonable Rates for Local Exchange Carriers	) WC Docket No. 07-135
High-Cost Universal Service Support	) WC Docket No. 05-337
Developing an Unified Intercarrier Compensation Regime	) CC Docket No. 01-92
Federal-State Joint Board on Universal Service	) CC Docket No. 96-45
Lifeline and Link-Up	) WC Docket No. 03-109

### COMMENTS of UNITED STATES CELLULAR CORPORATION

United States Cellular Corporation ("U.S. Cellular"), by counsel, hereby submits these Comments, pursuant to the Commission's Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking in the above-captioned proceeding.<sup>1</sup>

\_

<sup>&</sup>lt;sup>1</sup> Connect America Fund, WC Docket No. 10-90, A National Broadband Plan for Our Future, GN Docket No. 09-51, Establishing Just and Reasonable Rates for Local Exchange Carriers, WC Docket No. 07-135, High-Cost Universal Service Support, WC Docket No. 05-337, Developing an Unified Intercarrier Compensation Regime, CC Docket No. 01-92, Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Lifeline and Link-Up, WC Docket No. 03-109, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, FCC 11-13, 2011 WL 466775 (rel. Feb. 9, 2011) ("Notice"). The due date for comments on sections of the Notice addressed in these Comments is April 18, 2011. See Comment and Re-

U.S. Cellular provides Personal Communications Service and cellular services in 44 Metropolitan Statistical Areas, 100 Rural Service Areas, one Major Trading Area, and numerous Basic Trading Areas throughout the Nation. U.S. Cellular has received eligible telecommunications carrier ("ETC") status and is currently receiving high-cost support for its operations in Illinois, Iowa, Kansas, Maine, Missouri, Nebraska, New Hampshire, New York, North Carolina, Oklahoma, Oregon, Tennessee, Virginia, Washington, West Virginia, and Wisconsin.

#### I. INTRODUCTION.

The *Notice* reflects a dedicated effort by the Commission to undertake the task of fundamentally reforming and modernizing its Universal Service Fund (the "Fund" or "USF") system, recognizing that universal service "has been at the core of the Commission's mandate since its founding." U.S. Cellular commends the Commission for this effort.

Many of the Commission's proposals illustrate its commitment to reshape the Fund in a manner that will better address the challenge of achieving ubiquitous broadband deployment.

U.S. Cellular is concerned, however, that the Commission is proposing a new regulatory regime that would fail in many respects to capitalize on the enormous benefits that mobile broadband is capable of bringing to all Americans, and that would treat as largely irrelevant the Commission's principle of competitive neutrality.

U.S. Cellular discusses these concerns in the following sections, focusing in particular on the disadvantages of the Commission's reverse auction proposal, the shortcomings of the its proposals for the transition to its proposed Connect America Fund ("CAF") mechanisms, its ill-

ply Comment Dates Established for Comprehensive Universal Service Fund and Intercarrier Compensation Reform Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, CC Docket No. 96-45, 01-92, WC Docket Nos. 03-109, 05-337, 07-135, 10-90, and GN Docket No. 09-51, Public Notice, DA 11-411 (rel. Mar. 2, 2011) at 1.

advised proposal to place an up-front cap on ongoing CAF funding, and its disproportionate emphasis on favoring the totem of fiscal responsibility to the potential detriment of other universal service principles and goals.

U.S. Cellular also discusses its concern that a critical element of the Commission's proposed reforms—namely, treating broadband as a supported service pursuant to Section 254 of the Communications Act of 1934 ("Act")—is seriously flawed because the Commission's proposal has not been made pursuant to a recommendation from the Federal-State Joint Board on Universal Service ("Joint Board").

#### II. BRINGING MOBILE BROADBAND TO RURAL AMERICA.

Mobile broadband services and applications are becoming an increasingly important part of American life. As President Obama has explained, "[f]or our families and our businesses, high-speed wireless service [is] how we'll spark new innovation, new investment, new jobs." The Commission echoes these views in the *Notice*, observing that "[m]obile voice and mobile broadband services are playing an increasingly prominent role in modern telecommunications. Given the important benefits of and the strong consumer demand for mobile services, ubiquitous mobile coverage must be a national priority." In addition, the National Broadband Plan has pointed to the substantial growth of mobile broadband.

<sup>&</sup>lt;sup>2</sup> *Notice* at para. 2.

<sup>&</sup>lt;sup>3</sup> President Barack Obama, Remarks by the President on the National Wireless Initiative in Marquette, Michigan, at 6 (Feb. 10, 2011) ("President Obama Remarks") (unpaginated transcript). *See* U.S. Cellular Comments, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 05-337, NBP Notice # 19 (filed Dec. 7, 2009) ("U.S. Cellular Dec. 2009 Comments") at 10 (indicating that "mobile broadband applications are becoming a larger part of American life").

<sup>&</sup>lt;sup>4</sup> Notice at para. 241. See Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, WT Docket No. 05-265, Order on Reconsideration and Second Further Notice of Proposed Rulemaking, 25 FCC Rcd 4181, 4182-83 (para. 3) (2010) ("Data Roaming Reconsideration Order"):

A report released by the Commission last month further illustrates the importance of mobile broadband services. The report shows that, during the first half of 2010, subscribership for mobile wireless devices and data plans for full Internet access increased from 55.8 million to 71.2 million, an increase of 27.6 percent. During the same period, fixed broadband connections increased only 1.2 percent, from 80.7 million to 81.7 million.<sup>6</sup>

Chairman Genachowski has pointed out that "the Broadband Plan . . . placed unprecedented emphasis on mobile broadband, because few sectors of our economy offer greater opportunities for economic growth and improvements to our quality of life[,]" and the Chairman emphasized that "[t]he hunger for mobility is even greater than many imagined a year ago" when the Broadband Plan was issued.

Broadband deployment is a key priority for the Commission, and the deployment of mobile data networks will be essential to achieve the goal of making broadband connectivity available everywhere in the United States. We also seek to foster competition and the development of mobile data services with seamless and ubiquitous coverage. Ubiquitous coverage will enhance the unique social and economic benefits that a mobile service provides by enabling consumers to access information wherever they are, while competition will help to promote investment and innovation and protect consumer interests.

<sup>5</sup> See Omnibus Broadband Initiative, FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN (Mar. 16, 2010) ("NBP" or "Broadband Plan") at 76:

The use of wireless broadband is growing rapidly, primarily in the area of mobile connectivity . . . . Key drivers of this growth include the maturation of third-generation (3G) wireless network services, the development of smartphones and other mobile computing devices, the emergence of broad new classes of connected devices and the rollout of fourth-generation (4G) wireless technologies such as Long Term Evolution (LTE) and WiMAX.

<sup>&</sup>lt;sup>6</sup> Industry Analysis and Tech. Div., WCB, FCC, "Internet Access Services: Status as of June 30, 2010," at 3 & Table 1. *See Notice* at para. 8 (footnote omitted) (noting that "[m]obile services are vastly more prominent than even a few years ago—more than 27 percent of adults live in households with only wireless phones").

<sup>&</sup>lt;sup>7</sup> Chairman Julius Genachowski, FCC, Remarks on Broadband, at 5 (Mar. 16, 2011) ("Chairman Genachowski Remarks").

<sup>&</sup>lt;sup>8</sup> *Id.* Chairman Genachowski noted, for example, that mobile online shopping increased from \$1.4 billion to \$4 billion from 2009 to 2010, and that the number of downloaded mobile applications increased from 300 million to 5 billion during the same period. *Id.* 

Less than two weeks ago the Commission again emphasized the growing importance of advanced mobile broadband technologies, finding that:

Commercial mobile data services provided over advanced mobile broadband technologies have become an increasingly significant part of the lives of American consumers and the shape of the mobile industry. Mobile data services increasingly are used for a variety of both personal and business purposes, including back-up communications during emergencies and for accessibility. Data traffic has risen sharply over the past few years as a result of the increased adoption of smartphones combined with increased data consumption per device. 9

This growing importance of mobile broadband underscores the plight currently faced by many Americans in rural areas. The Commission has acknowledged the problem, indicating that "there remain many areas of the country where people live, work, and travel that lack mobile voice coverage, and still larger geographic areas that lack current generation mobile broadband coverage." U.S. Cellular has warned that there are "ever widening gaps [in the availability of mobile broadband] between 'have' and 'have-not' consumers [that] present significant challenges to providing employment, health care, and basic public safety." 11

The challenge to government policymakers is clear: Mobile broadband is important for consumers, businesses, educational and other institutions, and the national economy, but large geographic areas do not have any access to this vital resource. President Obama has focused on this challenge, and has issued a call to action: "We want to invest in the next generation of high-speed wireless coverage for 98 percent of Americans." <sup>12</sup>

<sup>&</sup>lt;sup>9</sup> Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, WT Docket No. 05-265, Second Report and Order, FCC 11-52 (rel. Apr. 7, 2011) ("Data Roaming Second Report and Order"), at para. 14.

<sup>&</sup>lt;sup>10</sup> *Notice* at para. 241.

<sup>&</sup>lt;sup>11</sup> U.S. Cellular Dec. 2009 Comments at 10.

<sup>&</sup>lt;sup>12</sup> President Obama Remarks at 8. President Obama's objectives for mobile broadband continue forward policies he advocated in the Senate. *See* Letter from Senator Richard J. Durbin and Senator Barack Obama to Kevin J. Martin, Chairman, FCC (filed July 26, 2007) (calling for the Commission to implement

President Obama has been blunt in explaining the basis for this commitment, reminding us that "we've always believed that we have a responsibility to guarantee all our people every tool necessary for them to meet their full potential. . . . Every American deserves access to the world's information. Every American deserves access to the global economy. We have promised this for 15 years. It's time we delivered on that promise."<sup>13</sup>

In seeking to assist in fulfilling this promise, the Commission should also heed the warning that "the clock is ticking on our mobile future." <sup>14</sup> Chairman Genachowski made this point in the context of assessing the growing imbalance between spectrum demand and spectrum supply, but his concern applies with at least equal force to rural America: If the Commission fails to reform its universal service mechanisms in a manner that gives significant priority to the deployment of mobile broadband networks in rural and high-cost areas, then there is a risk that the clock will run out on consumers, schools, hospitals, police departments, other community institutions, and businesses throughout rural America, and they will be forced to watch the burgeoning growth of mobile broadband from the sidelines.

The Commission should be commended for making a serious effort in the *Notice* to advance the goals for mobile broadband articulated by President Obama. In several respects, however, the *Notice* fails to propose a path that would move closer to these goals.

<sup>&</sup>quot;comprehensive reforms that ensure our nation's rural areas have access to a universal and modern tele-communications network that includes wireless and broadband services"), *quoted in* CTIA–The Wireless Association® Comments, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 05-337 (filed July 12, 2010) ("CTIA July 2010 Comments") at 11.

<sup>&</sup>lt;sup>13</sup> President Obama Remarks at 9.

<sup>&</sup>lt;sup>14</sup> Chairman Genachowski Remarks at 5.

A. Several Commission Proposals Would Fail To Advance Its Goal of Facilitating and Accelerating Mobile Broadband Deployment in Rural Areas.

Instances in which the Commission's proposals affecting mobile broadband should be modified and improved are discussed throughout these Comments. In this section U.S. Cellular highlights several proposals that are particularly at odds with the goal of promoting mobile broadband deployment in rural and high-cost areas.

First, the Commission proposes a unilateral phase-down of existing high-cost support received by competitive ETCs, 15 that would likely compound problems caused by the interim cap imposed by the Commission on competitive ETC support 16 and would usher in an uncertain future for the deployment of wireless broadband networks throughout rural America. Unless the phase-down of support is applied equitably to competitive ETCs and rural incumbent local exchange carriers ("LECs"), and is synchronized with the availability of sufficient support from new mechanisms to be adopted by the Commission, the proposed phase-down will slow or stall altogether the efforts of wireless carriers to bring their mobile broadband networks to rural and high-cost areas. For these reasons, the Commission should adopt a phase-down period for wireless carriers of ten years, and should apply comparable phase-down periods with respect to any measures it adopts to transition rural incumbent LECs to its new USF mechanisms.

Second, the Commission's single-winner reverse auction proposal<sup>17</sup> would bring an end to the coupling of universal service and pro-competitive policies designed to facilitate the dep-

<sup>&</sup>lt;sup>15</sup> *Notice* at para. 248. The phase-down would be effected in five equal installments, beginning in 2012. *Id.* 

<sup>&</sup>lt;sup>16</sup> See High-Cost Universal Service Support; Federal-State Joint Board on Universal Service, WC Docket No. 05-337, CC Docket No. 96-45, Order, 23 FCC Rcd 8834 (2008) ("Interim Cap Order"), aff'd, Rural Cellular Ass'n v. FCC, 588 F.3d 1095 (D.C. Cir. 2009).

<sup>&</sup>lt;sup>17</sup> See, e.g., *Notice* at para. 284.

loyment of networks and provision of affordable services in rural America. The Commission may be enticed to experiment with reverse auctions as a vehicle for cutting back universal service support, but reverse auctions would pose demonstrable and severe problems for the deployment of mobile broadband services.

A single-winner auction will hand over dominant market power to auction winners, skewing competitive markets, and recreating a problem that the Telecommunications Act of 1996<sup>18</sup> intended to resolve: Dominant carriers that control all of the customers and all of the universal service support will build barriers to competitive entry, and dealing with the anticompetitive and discriminatory incentives of these carriers will require monopoly-era regulatory structures and rules.

Third, although U.S. Cellular understands the challenges faced by the Commission in attempting to develop transitional rules and a new funding regime for rural incumbent LECs and their voice-centric legacy networks, there is cause for concern that the *Notice* errs on the side of endeavoring to carve out a protected status for rural incumbent LECs in their service territories. To take one example, the Commission seeks comment on a proposal to give rural incumbent LECs a "right of first refusal" ("ROFR") to be the exclusively-funded provider of voice and broadband services in areas in which these carriers currently operate as so-called "carriers of last resort" ("COLRs"). <sup>19</sup>

Under this proposal, competitive entry by wireless competitive ETCs would be precluded. The proposal clearly does not give priority to the goal of providing every American with access to affordable high-speed mobile broadband services.

<sup>&</sup>lt;sup>18</sup> Pub. L. No. 104-104, 110 Stat. 56 (1996) ("1996 Act").

<sup>&</sup>lt;sup>19</sup> See Notice at para. 431.

And, *fourth*, the proposed overall cap on ongoing support that would be provided by the proposed CAF<sup>20</sup> would further drag down efforts to deploy mobile broadband networks in rural America. While U.S. Cellular is sympathetic to the Commission's concerns regarding the need for fiscal responsibility in developing its universal service support mechanisms, <sup>21</sup> U.S. Cellular also strongly believes that it would be a mistake for the Commission to pursue universal service objectives on the cheap. As a general matter, considerable investment is needed to bring broadband to unserved and underserved areas, <sup>22</sup> and placing an arbitrary cap on the level of universal service support available for deploying and operating mobile and other broadband networks simply cannot be squared with the goal of bringing broadband to all Americans.

B. The Door Is Still Open for the Commission To Make More Productive Choices in Designing New Universal Support Mechanisms for Broadband.

Steps the Commission should consider to improve the chances for achieving its broad-band goals are discussed throughout these Comments. In this section, U.S. Cellular summarizes three choices the Commission should make in this rulemaking that would enhance the prospects for the deployment and operation of broadband networks in rural and high-cost areas, and would do so in a reasonable and equitable manner.

<sup>&</sup>lt;sup>20</sup> *See id.* at para. 414.

<sup>&</sup>lt;sup>21</sup> See, e.g., *id.* at paras. 11, 14, 33, 94, 121, 163, 210, 249, 457. Fiscal responsibility is one of the explicit principles the Commission plans to follow in proceeding with USF reform:

Fiscal Responsibility. Control the size of USF as it transitions to support broadband, including by reducing waste and inefficiency. We recognize that American consumers and businesses ultimately pay for USF, and that this contribution burden may undermine the benefits of the program by discouraging adoption.

*Id.* at para. 10.

<sup>&</sup>lt;sup>22</sup> See, e.g., Michael J. Copps, Acting Chairman, FCC, BRINGING BROADBAND TO RURAL AMERICA: REPORT ON A RURAL BROADBAND STRATEGY, 24 FCC Rcd 12792, 12842 (para. 113) (2009) (footnote omitted) (pointing out that "rural networks can often be even more expensive to deploy and potentially more expensive to maintain than networks in non-rural areas for a variety of reasons, which can serve as a formidable barrier to rural broadband deployment").

First, the Commission should abandon its reverse auction experiment, and use a forward-looking cost model to award support for both Phase I and Phase II CAF.<sup>23</sup> Relying on a forward-looking cost model would promote—rather than close off—competitive entry, and would also advance the Commission's principle of fiscal responsibility by providing CAF support to efficient carriers. Unlike the completely untested reverse auction mechanism, the Commission has long relied on cost modeling to disburse portions of its universal service support.

Second, the Commission could better serve its goal of ensuring that consumers in rural areas have access to affordable mobile broadband services by discarding its proposals that would cede to rural incumbent LECs substantial market power in their service areas. Wireless competitive ETCs will not be able to play an effective role in advancing the Commission's broadband goals if they are not provided with reasonable access to support that is needed for network deployment and the provision of mobile broadband services.

The Commission needs to craft a balanced approach: While U.S. Cellular understands the important role that rural incumbent LECs play in broadband deployment, as well as the complexities involved in transitioning rural incumbent LECs' legacy voice networks into a broadband world, the Commission should not embrace policies that short change mobile broadband. The Commission's policy choices should be guided by its own findings regarding both the growing importance of, and the intense consumer demand for, mobile broadband.

And, *third*, the Commission should consider a funding proposal that U.S. Cellular has already put on the table. U.S. Cellular has called for the establishment of separate fixed and mo-

10

<sup>&</sup>lt;sup>23</sup> The Commission proposes to undertake comprehensive reform in two stages: a set of immediate reforms including, among other near-term goals, the establishment of the CAF (Phase I), followed by final selection of the long-term CAF funding mechanism (Phase II), based on monitoring and evaluation of experiences with the Phase I reforms. *Notice* at para. 18.

bile broadband funds in Phase II CAF, which would provide for a realistic means of moving toward achievement of the Commission's mobile broadband goals in a competitively neutral manner. U.S. Cellular's proposal would target an appropriate level of support to areas that need it most, and would encourage carriers to enter rural and high-cost markets.<sup>24</sup>

# III. REVIVING THE COMMISSION'S PRINCIPLE OF COMPETITIVE NEUTRALITY.

An effective way for the Commission to encourage and facilitate the deployment of advanced mobile broadband networks and services in rural and high-cost areas is through the adoption of pro-competitive policies, consistent with statutory mandates, <sup>25</sup> and adherence to its principle of competitive neutrality. <sup>26</sup> Wireless competitive ETCs will face an uphill task in attempting to bring mobile broadband networks to unserved and underserved areas if the result of the Commission's universal service reforms is to hand a competitive advantage to other service providers.

Chairman Genachowski has predicted that the Commission's universal service "reforms will be technology neutral, and we expect that wireless providers will be active participants in the Connect America Fund." U.S. Cellular is concerned, however, that the Commission, in de-

<sup>&</sup>lt;sup>24</sup> U.S. Cellular's proposal for separate CAF funds is discussed further in Section III.C., *infra*.

<sup>&</sup>lt;sup>25</sup> Congress has established twin objectives in the Act: Sufficient support mechanisms must be maintained to preserve and advance universal service, and competition must be promoted in the telecommunications marketplace. "Section[s] 254(b) and 214(e) of the 1996 Act provide the statutory framework for a system that encourages competition while preserving and advancing universal service." Rural Task Force, *White Paper 5: Competition and Universal Service* (2000) at 8 (accessed at http://www.wutc.wa.gov/rtf).

<sup>&</sup>lt;sup>26</sup> The Commission has established the principle that "universal service mechanisms and rules" should "neither unfairly advantage nor disadvantage one provider over another, and neither unfairly favor nor disfavor one technology or another." *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8801 (para. 47) (1997) ("*USF First Report and Order*") (subsequent history omitted). *See Notice* at para. 82.

<sup>&</sup>lt;sup>27</sup> Chairman Julius Genachowski, FCC, Remarks, CTIA Wireless 2011, at 3 (Mar. 22, 2011).

veloping several key proposals in the *Notice*, has left pro-competitive policies and its own principle of competitive neutrality by the wayside. If these proposals are not modified, then the participation of wireless carriers in CAF could be in jeopardy. These concerns, together with some possible remedies, are discussed in the following sections.

A. The Commission Is Misguided in Claiming That Its Proposals To Support Broadband Are Competitively Neutral.

The Commission asserts that its proposals in the *Notice* are competitively neutral, but, in at least two critical cases, the Commission proposes to develop and administer new support mechanisms in a manner that would depart from its competitive neutrality principle.

1. The Commission Affirms Competitive Neutrality, But Its Proposals Lose Sight of the Principle in Critical Respects.

As U.S. Cellular has noted, the Commission in the *USF First Report and Order* established the principle of competitive neutrality as a means of pursuing the twin statutory mandates of universal service and competition. This core principle is the only principle the Commission has adopted pursuant to its authority under Section 254(b)(7) of the Act,<sup>28</sup> and it rests on the same footing as the principles enacted by Congress in Section 254(b) and applies with the same force as the statutory principles. Universal service funding mechanisms, in order to comply with the Act, must not only be sufficient to maintain and advance universal service, but also must be competitively neutral.<sup>29</sup>

The Commission references its competitive neutrality principle in the *Notice*, and claims that its "proposal to support broadband is competitively neutral because it will not unfairly ad-

47 O.S.C. § 234(0)(7).

<sup>&</sup>lt;sup>28</sup> 47 U.S.C. § 254(b)(7).

<sup>&</sup>lt;sup>29</sup> Alenco Communications, Inc. v. FCC, 201 F.3d 608, 616 (5th Cir. 2000) ("Alenco").

vantage one provider over another or one technology over another."<sup>30</sup> To a limited degree the Commission incorporates into the *Notice* an inquiry regarding whether certain proposals would be consistent with the principle,<sup>31</sup> but, for the most part, the principle is ignored by the Commission in a rulemaking notice that spans nearly 300 pages and that addresses the fundamental reform of the Commission's universal service program. Even worse, as U.S. Cellular discusses in the following sections, key proposals affecting the support of mobile broadband services are in conflict with the principle of competitive neutrality.

2. The Proposal To Phase Down the Competitive ETC Interim Cap Is Not Competitively Neutral.

The Commission proposes to reduce the interim cap on competitive ETC high-cost funding in annual 20 percent installments, beginning in 2012.<sup>32</sup> The *Notice* does not propose the implementation of any mechanisms that would provide competitive ETCs, during the time the phase-down is being carried out, with access to any ongoing CAF support that would be sufficient to offset the reduced high-cost support.

Thus, the Commission does not propose any mechanism that would enable wireless competitive ETCs to continue their plans for the deployment of mobile broadband networks, for the ongoing operation and maintenance of these networks, or for the continued operation of existing voice networks. In many cases, these plans have been initiated pursuant to commitments made

<sup>&</sup>lt;sup>30</sup> *Notice* at para. 82 (footnote omitted).

<sup>&</sup>lt;sup>31</sup> See Notice at para. 390 (seeking comment on a "Broadband Now Plan," a proposal made in 2009 by a group of mid-sized carriers that included the suggestion that wire center support should be awarded on a competitively neutral basis); *id.* at para. 459 (proposing "more competitively neutral reporting requirements that would apply to all high-cost and CAF recipients").

<sup>&</sup>lt;sup>32</sup> *Id.* at para. 248. The Commission's competitive ETC funding phase-down proposal is discussed further in Sections VII.B.3. and VII.B.4., *infra*.

by the wireless competitive ETCs to state regulatory commissions as conditions to the grant of ETC status to the wireless carriers by the commissions.

While proposing this complete phase-down of competitive ETC funding, the Commission has not proposed any plans for a parallel phase-down of high-cost funding currently received by rural incumbent LECs. For example, in contrast to the complete phase-down of competitive ETC high-cost support proposed by the Commission, the *Notice* calls for only "a modest reduction" in high-cost loop support currently received by rural incumbent LECs, based on their embedded costs. The Commission does not present any justification for its proposals in the *Notice* for differing treatment of existing high-cost support received by rural incumbent LECs and competitive ETCs.

Commenters in earlier proceedings have warned against the dangers caused by such disparities. CTIA, for example, has explained that "[d]rawing down CETC support further, without making similar changes to incumbent LEC funding, places the burden of reform solely on one class of consumer, one class of provider, and one technology. This is particularly problematic because . . . [mobile broadband] is a technology and functionality that consumers increasingly prefer."<sup>35</sup>

In order to be competitively neutral, the Commission's proposals for transitioning ETCs to its new support mechanisms should afford all ETCs with comparable opportunities and expose all ETCs to comparable risks. The proposals made in the *Notice* do not meet this test, and instead would impose unfair competitive disadvantages on competitive ETCs. For these reasons, U.S.

<sup>34</sup> *Id.* at para. 20 (Figure 2).

<sup>&</sup>lt;sup>33</sup> *Notice* at para. 180.

<sup>&</sup>lt;sup>35</sup> CTIA July 2010 Comments at 11.

Cellular urges the Commission to adopt a more reasonable phase-down period for Competitive ETCs, and to ensure that all carriers are treated equitably by the Commission's transition mechanisms. Specifically, as U.S. Cellular has discussed, <sup>36</sup> the Commission should adopt a ten-year phase-down of wireless competitive ETCs' high-cost support, with comparable phase-down periods applied for purposes of transitioning rural incumbent LECs to the Commission's new mechanisms.

3. The Proposal To Redistribute Phased-Down Competitive ETC Support Is Not Competitively Neutral.

Existing competitive ETC funding that would be phased down under the Commission's proposal would be redirected to CAF "for redistribution through new competitive mechanisms for providing support to both mobile and fixed broadband . . . ."<sup>37</sup> The Commission asks for comment regarding whether these new mechanisms "would support mobile networks, especially mobile broadband networks, in a manner more consistent with our proposed overarching goals for universal service reform . . . ."<sup>38</sup>

U.S. Cellular will explain in later sections of these Comments that the treatment of mobile broadband networks under the proposed CAF mechanisms would not be an optimum means of advancing the Commission's universal service reform goals. The issue U.S. Cellular addresses here, however, is competitive neutrality, and this discussion should begin by noting that the Commission does not even raise this issue in the *Notice* in connection with its proposed CAF

<sup>37</sup> *Notice* at para. 249. The Commission also proposes an alternative approach that would presumptively redirect available competitive ETC support to CAF, but that would also allow for waivers or exceptions. *Id.* at para. 250.

<sup>&</sup>lt;sup>36</sup> See Section II.A., *supra*.

<sup>&</sup>lt;sup>38</sup> *Id.* at para. 249. The proposed overarching goals are modernizing for broadband; fiscal responsibility; accountability; and the use of market-driven, incentive-based policies. *See id.* at para. 10.

mechanisms. An examination of the mechanisms reveals that, in at least three important respects, the Commission's CAF proposals are not competitively neutral.

First, the ROFR approach discussed in the Notice, which would guarantee rural incumbent LECs the opportunity to be the sole providers of "both voice and broadband to customers in [their service] area[s] for a specific amount of ongoing support[,]"<sup>39</sup> is not competitively neutral. As U.S. Cellular has discussed, 40 this proposal would have the effect of precluding competitive entry in service areas for which rural incumbent LECs exercise the ROFR option prescribed by the Commission.

In addition, the ROFR approach would guarantee support to the incumbents (so long as they continued to meet program requirements),<sup>41</sup> while, at the same time, competitive ETCs would not be given any comparable opportunity to secure ongoing CAF support during or after the phase-down of their existing capped high-cost support.

*Second*, the Commission's single-winner reverse auction proposal is not competitively neutral because, instead of encouraging competitive entry and the natural price competition that comes with it, the proposed auction mechanism would install a government-selected monopoly service provider in each geographic service area. 42 If a competitive ETC providing mobile

<sup>&</sup>lt;sup>39</sup> *Id.* at para. 431 (footnote omitted).

<sup>&</sup>lt;sup>40</sup> See Section II.A., supra.

<sup>&</sup>lt;sup>41</sup> See Notice at para. 431 & n.604.

<sup>&</sup>lt;sup>42</sup> The Commission recently observed that, "[a]s data services increasingly become the focus of the mobile wireless services, consumers increasingly expect their providers to offer competitive broadband data services . . . ." Data Roaming Second Report and Order at para. 15. Clearly, the Commission's single-winner reverse auction proposal would do little to meet these customer expectations in rural and high-cost areas. Such a result would thus conflict with the Commission's policies articulated in the Data Roaming Second Report and Order, and would also be contrary to the statutory mandate regarding rate and service comparability. See, e.g., Rural Cellular Association ("RCA") Comments, WT Docket No. 10-208 (filed Dec. 16, 2010) ("RCA Dec. 2010 Comments"), at 2 (noting that, "[w]hile a reverse auction might bring

broadband services is not successful in underbidding a rural incumbent LEC in a reverse auction, then the competitive ETC would be cut off from CAF funding and consumers in the service area involved would be adversely affected. By subjecting competitive ETCs to single-winner reverse auctions that make service areas the exclusive domains of reverse auction winners, while at the same providing an ROFR option exclusively to rural incumbent LECs, the Commission's proposal would disadvantage competitive ETCs providing mobile broadband services. The Commission therefore would be wrong in concluding that its single-winner reverse auction proposal is competitively neutral.

And, *third*, the Commission's proposal to permit rural incumbent LECs to continue receiving universal service support based on their embedded costs, while at the same time imposing a single-winner reverse auction mechanism on competitive ETCs, is not competitively neutral. As the Commission itself has noted, the objective of reverse auctions is to allow the Commission "to select the providers that require the least support . . . ."<sup>44</sup> On the other hand, the Commission has expressed concerns that "a support mechanism based on . . . a carrier's embed-

co

competition within an electronic auction room, it would not have a competitively neutral effect in the marketplace").

<sup>&</sup>lt;sup>43</sup> The Commission envisions circumstances in which "it could determine that support for [small, rural] carriers should remain based on reasonable actual investment, rather than a cost model or auction." *Notice* at para. 448.

<sup>&</sup>lt;sup>44</sup> Universal Service, Mobility Fund, WT Docket No. 10-208, Notice of Proposed Rulemaking, 25 FCC Rcd 14716, 14723 (para. 16) (2010) ("Mobility Fund Notice"). See Connect America Fund, A National Broadband Plan for Our Future, High-Cost Universal Service Support, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 05-337, Notice of Inquiry and Notice of Proposed Rulemaking, 25 FCC Rcd 6657, 6666 (para. 19) (2010) (indicating that the Commission is contemplating a reverse auction mechanism that will "identify the provider that will serve the area at lowest cost") (internal quotation marks omitted) (quoting NBP at 145); Irene S. Wu, Maximum Impact for Minimum Subsidy: Reverse Auctions for Universal Access in Chile and India, FCC Staff Working Paper 2 (Oct. 2010) at 1 (noting that the goal of a reverse auction mechanism "is to use competitive forces to minimize the government subsidy required to achieve public objectives"), quoted in U.S. Cellular Comments, WT Docket No. 10-208 (filed Dec. 16, 2010) ("U.S. Cellular Dec. 2010 Comments"), at 19, n.44.

ded costs . . . provides no incentives for ETCs to provide supported services at the minimum possible costs . . . . "45

The Commission's analyses reveal a tension between these two support mechanisms: ETCs governed by an auction regime drive down costs, while ETCs governed by an embedded cost regime drive up costs. Tilting the ground rules for CAF disbursements in this manner would seem to provide an unfair competitive advantage to rural incumbent LECs, and the proposed embedded cost funding mechanism therefore cannot be viewed as competitively neutral.

B. The Advancement of Mobile Broadband Deployment Should Be Established by the Commission as an Independent Priority.

In setting a path for universal service reform, the Commission proposes four specific priorities for the universal service high-cost program: (1) preserve and advance voice service; (2) ensure deployment of modern broadband networks; (3) ensure that rates for both voice and broadband services are reasonably comparable in all regions; and (4) limit contribution burdens on households.<sup>46</sup>

The Commission also seeks comment on an additional priority, and U.S. Cellular suggests that adopting this fifth priority would provide one means of shifting the emphasis of the Commission's proposed universal service reforms toward a more competitively neutral regime.

<sup>&</sup>lt;sup>45</sup> See High-Cost Universal Service Support; Federal-State Joint Board on Universal Service, WC Docket No. 05-337, CC Docket No. 96-45, Notice of Proposed Rulemaking, 23 FCC Rcd 1495, 1500 (para. 11) (2008). The Commission also observed that a forward-looking cost model would not provide any incentives for a carrier to provide service at the minimum possible cost, *id.*, but this view conflicts with earlier conclusions by the Commission that, in the long run, forward-looking economic cost is the best approximation of the costs that would be incurred by an efficient carrier in the market. See Section V.C., *infra*.

<sup>&</sup>lt;sup>46</sup> *Notice* at para. 80.

Specifically, the Commission asks whether "advancing the deployment of mobile networks [should] be its own independent priority . . . ."<sup>47</sup>

U.S. Cellular endorses this approach. Designating the deployment of mobile networks as a specific priority would reflect recent and continuing marketplace developments, would take into account "the important role that mobility can play in improving everyday lives of Americans as well as contributing to our public safety, national economy and competitiveness[,]" and would be responsive to increasing consumer demand for mobile broadband services and applications. 49

In addition, assigning a specific priority to the deployment of mobile networks would provide a stronger basis for the Commission's fashioning CAF support mechanisms, as well as transition rules and requirements, which balance the priority of preserving and advancing voice service with the priority of advancing mobile network deployment. This balancing of priorities, in turn, should lead to transitional rules and CAF mechanisms that adhere to the Commission's core principle of competitive neutrality.

<sup>&</sup>lt;sup>47</sup> *Id.* at para. 81.

<sup>&</sup>lt;sup>48</sup> *Id.* at para. 80.

<sup>&</sup>lt;sup>49</sup> See, e.g., CTIA Comments, WC Docket No. 07-245, GN Docket No. 09-51 (filed Aug. 16, 2010), at 4 (footnote omitted) (noting that, by the end of 2009, "there were an estimated 103 million unique 3G wireless subscribers and more than 122 million total 3G wireless subscriptions in the United States").

C. The Commission Could Advance Competitive Neutrality by Adopting U.S. Cellular's Proposal for Two Separate Connect America Fund Mechanisms for Fixed and Mobile Broadband Services.

Another step that the Commission should take to ensure that its new CAF mechanisms are competitively neutral is to adopt U.S. Cellular's proposal for two separate CAF funds, one for fixed broadband, and one for mobile broadband.<sup>50</sup>

The Commission could structure support for these two funds in a manner that would adjust the current imbalance in funding for fixed and mobile networks. U.S. Cellular has pointed out that "much of the more than \$3 billion in high-cost support flowing to wireline networks continues to support *fixed voice services*, and roughly \$1.3 billion goes to support *mobile voice services*." Today, with the imposition of multiple phase downs in the course of the Verizon-Alltel and Sprint-Clearwire merger proceedings, the amount of support to mobile services is substantially less. U.S. Cellular has proposed that the Commission establish separate funds that support ongoing investments in both fixed and mobile broadband infrastructure, targeting an appropriate level of support to areas that need it most, and encouraging carriers to enter rural and high-cost markets. <sup>52</sup>

By establishing separate CAF funds for fixed and mobile broadband, and by allocating CAF disbursements between the funds in a manner that achieves a sufficient level of funding for both fixed and mobile broadband deployment, the Commission would be acting effectively to ensure that the CAF funding mechanisms are competitively neutral.

<sup>&</sup>lt;sup>50</sup> The Commission has sought comment on proposals to support both fixed and mobile networks under CAF. *See Notice* at para. 403. These proposals are discussed in Sections V.C. and IX.A., *infra*.

<sup>&</sup>lt;sup>51</sup> U.S. Cellular Comments, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 05-337 (filed July 12, 2010) ("U.S. Cellular July 2010 Comments"), at 29 (emphasis in original).

<sup>&</sup>lt;sup>52</sup> U.S. Cellular Reply Comments, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 05-337 (filed Aug. 11, 2010) ("U.S. Cellular Aug. 2010 Reply"), at 30.

# IV. THE COMMISSION SHOULD AVOID ACTIONS THAT EXCEED ITS CONGRESSIONALLY DELEGATED AUTHORITY.

A. The Commission Lacks Statutory Authority To Adopt Reverse Auctions.

The Commission has previously expressed the view that it has authority under the Act to adopt a reverse auction mechanism, because of its opinion that such a mechanism would be consistent with Section 254 of the Act, would rely on market forces, and would minimize regulation. The fact is that the Commission is wrong on all counts. Further, there is no basis for a claim that the use of the Commission's asserted delegated authority to establish a single-winner reverse auction mechanism would be consistent with the provisions of Section 214(e) of the Act.

The Commission attempts to support its claim that it has statutory authority to limit CAF support to only one provider per unserved area by arguing that, although Section 214(e) of the Act<sup>54</sup> gives state commissions and the Commission authority to designate more than one ETC in a service area, "that designation merely makes a provider eligible to receive support; it does not guarantee support."<sup>55</sup> This reading of Section 214(e) does not withstand scrutiny.

The problem with the Commission's analysis of the application of Section 214 to its reverse auction proposal is that the Commission's interpretation would turn the ETC designation process into a nullity. If a state commission designates an additional ETC in a given service area, pursuant to the state commission's authority in Section 214(e)(2), the purpose and intent of the state commission's designation (as envisioned by the Act, and by the state commission) is that the designated ETC would receive support to provide service in rural and high-cost areas in the state. A reverse auction process, by short-circuiting the designated ETC's opportunity to receive

<sup>&</sup>lt;sup>53</sup> See USF First Report and Order, 12 FCC Rcd at 8951 (para. 325), cited in Notice at para. 262.

<sup>&</sup>lt;sup>54</sup> 47 U.S.C. § 214(e).

<sup>&</sup>lt;sup>55</sup> *Notice* at para. 264.

support, would have the effect of canceling out the state commission's Section 214(e)(2) authority. Such a result could not have been intended by Congress.

In addition, even if it could be said that the Commission's reverse auction scheme is consistent with Section 214 (which it is not), designating only one ETC in a service area, as U.S. Cellular discusses further below, conflicts with the mandate of the 1996 Act to promote competition in local exchange areas. This conflict is fatal to the reverse auction proposal, regardless of whether any credibility is given to the Commission's claim that its proposal is within the bounds of Section 214.

A further legal problem with the Commission's single-winner auction proposal is revealed by the Commission's concession that, if it makes broadband a supported service under Section 254, then all ETCs would be *required* to provide broadband.<sup>56</sup> Establishing such a requirement would seem to be problematic in the context of a single-winner auction mechanism. The Commission seeks to avoid this problem by arguing that it does not intend "to create an unfunded mandate for new obligations. To the extent firms that bid for support do not receive funding to build out unserved areas, we recognize the need for a flexible approach in developing timelines for the deployment of broadband."<sup>57</sup>

In U.S. Cellular's view, the Commission's endeavoring to create "flexible" timelines would not cure the problem that ETCs that are not auction winners would still be *required* to build out broadband networks in rural and high-cost areas, but would *not* receive any universal service support. Section 254 does not give the Commission authority to impose universal service obligations while also closing off opportunities for carriers subject to those obligations to receive

<sup>&</sup>lt;sup>56</sup> *Id.* at para. 265.

<sup>&</sup>lt;sup>57</sup> *Id*.

USF support. This expensive proposition would rapidly diminish service options for consumers in high-cost areas.

Accordingly, if broadband is defined as a supported service, the Commission must ensure that support mechanisms provide support that is sufficient to ensure that the choices made by states to designate more than one carrier are accommodated. As discussed below, support that is made sufficient through the use of a model, and portable so that consumers control which carrier receives support, is consistent with the Act.<sup>58</sup>

In addition to these issues regarding the Commission's reverse auction proposal extending beyond its delegated authority under the Act, there are several other legal problems with the proposal. *First*, based on the Commission's own standards, its use of a reverse auction mechanism would not be consistent with the intent of the 1996 Act. Although the reverse auction process purportedly is "market driven," the effect of the auction proposal would be to drive market forces out of ETC service areas.

Even assuming *arguendo* that the reverse auction mechanism produces "market driven" costs for the delivery of supported broadband services in rural and high-cost areas, this assumption does not counteract the indisputable fact that single-winner reverse auctions would drive competition out of rural and high-cost service areas.<sup>59</sup> As U.S. Cellular has previously explained,

<sup>58</sup> See Section V.C., *infra*.

The reverse auction approach potentially creates very powerful competition *for* the market that can be used to drive down the price of the subsidy that government pays. However, the cost of creating this very powerful competition *for* the market is that after a winner is declared, there will be a significant reduction in competition *within* the market for cus-

<sup>&</sup>lt;sup>59</sup> See Ex Parte Letter from David A. LaFuria, Counsel to U.S. Cellular, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 09-51, WC Docket No. 05-337 (Jan. 28, 2010), Enclosure, William P. Rogerson, "Problems with Using Reverse Auctions To Determine Universal Service Subsidies for Wireless Carriers," Jan. 14, 2010 (prepared at the request of U.S. Cellular) at 6-7 (emphasis in original), *quoted in* U.S. Cellular Dec. 2010 Comments at 19:

such an auction mechanism "would tend to install monopoly service providers in rural and high-cost markets, it would suppress competitive entry, and it would threaten to inflict collateral damage even beyond these markets." <sup>60</sup>

The Act has been interpreted to require that the universal service program must treat all market participants equally, so that the market, and not government regulators, determines who competes for and delivers services to customers. A reverse auction mechanism not only would fail to treat market participants equally, but it would not even allow there to be any supported market participants, other than the auction winner.

The proposed reverse auction mechanism thus appears to be an inapt policy choice because it would forego any effort to produce competitive conditions in areas receiving CAF support, even though promoting competition in these areas (in addition to having been mandated by the 1996 Act) would advance the goal of rate and service comparability by seeking to replicate the competitive conditions present in urban markets. Such an undertaking would be sound public policy because, as the Department of Justice has explained:

The operative question in competition policy is whether there are policy levers that can be used to produce superior outcomes, not whether the market resembles the textbook model of perfect competition. In highly concentrated markets, the

tomers. It is important to recognize that wireless carriers operate in markets where the prices they charge and the quality and type of services they provide are largely unregulated. It is local competition among competing carriers that creates powerful ongoing incentives for firms to charge lower prices, to improve their quality of service and level of coverage, and to introduce new advanced services as rapidly as possible.

Professor Rogerson is Professor of Economics at Northwestern University and a former Chief Economist at the Commission.

<sup>&</sup>lt;sup>60</sup> U.S. Cellular Reply Comments, WT Docket No. 10-208 (filed Jan. 18, 2011) ("U.S. Cellular Jan. 2011 Reply"), at 20.

<sup>&</sup>lt;sup>61</sup> *Alenco*, 201 F.3d at 616.

policy levers often include . . . public policies that affirmatively lower entry barriers facing new entrants and new technologies. <sup>62</sup>

Thus, even though service areas receiving Fund support may not be textbook examples of perfect competition, public policy still should be geared toward the use of competitive levers to drive favorable outcomes. The Commission's reverse auction proposal turns its back on such an approach.

Second, the Commission is incorrect in assuming that a reverse auction mechanism would minimize regulation. <sup>63</sup> The auction mechanism itself would represent an imposing regulatory superstructure, with detailed and complicated rules attempting to govern participants' eligibility and the workings of the auction process itself. One daunting objective of these extensive rules would be to attempt to ferret out and prevent collusive bidding activities and other imaginative attempts by some auction participants to game the auction process and engage in anticompetitive behavior.

Even more problematic, however, is the fact that the reverse auction process itself would be only the beginning for the Commission's regulation. U.S. Cellular has previously identified this problem, noting that the use of a reverse auction mechanism would force the Commission to

\_

<sup>&</sup>lt;sup>62</sup> U.S. Dept. of Justice, Ex Parte Submission, GN Docket No. 09-51 (filed Jan. 4, 2010), at 11, *quoted in* NBP at 62, n.4. *See* NBP at 29 (pointing out that "[c]ompetition is a major driver of innovation and investment, and the Federal Communications Commission [has] many tools to influence competition in different areas of the broadband ecosystem"); Lee L. Selwyn & Helen E. Golding, *Revisiting the Regulatory Status of Broadband Internet Access: A Policy Framework for Net Neutrality and an Open Competitive Internet*, 63 FED. COMM. L.J. 91, 132 (2010).

<sup>&</sup>lt;sup>63</sup> Even if the Commission were correct in its assertion that reverse auctions would avoid excessive regulation, and that this somehow provides the Commission with legal authority to utilize a reverse auction funding mechanism, see *USF First Report and Order*, 12 FCC Rcd at 8951 (para. 325), the fact is that reverse auctions would produce excessive regulation, and this provides strong policy reasons for rejecting reverse auctions. The policy ramifications of the reverse auction proposal are discussed in Section V.A.1., *infra*.

attempt "to fashion rules and requirements to protect consumers from the auction winner's exercise of dominant power in the market awarded by the Commission." <sup>64</sup>

Ensuring that the dominant service provider, ordained by the single-winner auction process, charges affordable and non-discriminatory rates, adheres to desired levels of service quality, and does not thwart competitive entry, would require the Commission to adopt regulatory requirements and to dedicate sufficient funding and personnel resources to enforce the requirements. In U.S. Cellular's view, the success of these Commission efforts would be uncertain, creating a real risk that consumers in rural and high-cost areas would be harmed by the proposed reverse auction mechanism.

And, *third*, a reverse auction mechanism would preclude ETCs (other than auction winners) from receiving any universal service support, even though these ETCs would otherwise remain eligible to draw funding pursuant to the requirements of Sections 214 and 254 of the Act. Such an outcome would thwart the will of state commissions that made ETC designations, as well as the will of Congress in empowering them to do so.

In addition, reverse auctions would lead to excessive prices in rural and high-cost areas (unless the Commission regulated rates), and this would violate the principles of Section 254 that consumers must have access to advanced telecommunications services and information services at affordable rates that are also comparable to rates charged in urban areas.<sup>65</sup>

In sum, Congress specifically permitted states to designate more than one ETC. To summarily rule that only one ETC will be funded violates clear Congressional intent. The Commis-

\_

<sup>&</sup>lt;sup>64</sup> U.S. Cellular Dec. 2010 Comments at 19.

<sup>&</sup>lt;sup>65</sup> See Cellular South, Inc., N.E. Colorado Cellular, Inc., d/b/a Viaero Wireless, RCA, Westlink Communications, LLC ("Cellular South") Comments, WT Docket No. 10-208 (filed Dec. 16, 2010) ("Cellular South Dec. 2010 Comments"), at 20.

sion cannot reasonably maintain that Section 254 gives it the authority to impose universal service obligations on ETCs, while at the same time foreclosing their receipt of any universal service support. Nor can it claim that complying with Congress' wishes would be impossible. Many times the Commission has affirmed that portable support that is sufficient to provide consumers in high-cost areas with access to advanced services fulfills Congressional intent.<sup>66</sup>

B. The Proposed Use of Census Blocks As Service Areas for Universal Service Support Would Not Be Consistent with the Communications Act of 1934.

The Commission's proposal to provide support pursuant to its new mechanisms on the basis of census blocks or aggregations of census blocks<sup>67</sup> would be inconsistent with Section 214(e)(5) of the Act,<sup>68</sup> which provides that, in the case of areas served by rural telephone companies, the area to be used for purposes of providing support must be the rural telephone company's study area, unless the Commission and the states agree to "establish a different definition of service area for such company."<sup>69</sup>

If the Commission seeks to disburse support based on census blocks, then census blocks would first need to be defined as "service areas" pursuant to the requirements of Section 214. The Commission gives no indication in the *Notice* that it intends to undertake such a process with each state commission.

<sup>&</sup>lt;sup>66</sup> See, e.g., USF First Report and Order, 12 FCC Rcd at 8786 (para. 15) ("The amount of support will be explicitly calculable and identifiable by competing carriers, and will be portable among competing carriers, i.e., distributed to the eligible telecommunications carrier chosen by the customer.").

<sup>&</sup>lt;sup>67</sup> *Notice* at para. 293.

<sup>&</sup>lt;sup>68</sup> 47 U.S.C. § 214(e)(5).

<sup>&</sup>lt;sup>69</sup> *Id*.

C. Before Adopting Broadband as a Supported Service, the Commission Must First Seek and Accept the Recommendation of the Federal-State Joint Board.

To put broadband services on the list of supported services, the Joint Board must first recommend that the Commission do so, "consider[ing] the extent to which such telecommunication services" are, *inter alia*, "being deployed in public telecommunications networks by telecommunications carriers." Congress intended for the Joint Board to act independently, to provide the Commission with expert advice from a combination of federal, state, and consumer advocacy sources.

In 2008, the Commission rejected recommendations from the Joint Board concerning universal service reforms, as was its right pursuant to the Act.<sup>71</sup> But at least, at that time, the Commission actually had before it Joint Board recommendations for the Commission to consider. In 2009, the Commission staff commenced work on the Broadband Plan, completing the NBP in 2010. Now, the Commission is proceeding to reform universal service without first obtaining a Joint Board recommendation, as required by Sections 254(a)(2) and 254(c)(1), whenever the definition of supported services is to be revised.

The Commission would be well served to commence a Joint Board proceeding to determine whether the tests set forth in Section 254(c)(1) have been met, and to advise on how best to support broadband consistent with Title II of the Act. While there appears to be widespread sentiment that the Commission should make broadband a supported service, this is no excuse to cut corners and avoid the statutory requirement to seek recommendations from the Joint Board.

<sup>&</sup>lt;sup>70</sup> 47 U.S.C. § 254(c)(1)(C).

<sup>&</sup>lt;sup>71</sup> Federal-State Joint Board on Universal Service, WC Docket No. 05-337, Order on Remand, Report and Order, and Further Notice of Proposed Rulemaking, 24 FCC Rcd 6475, 6492 (para. 37) (2008).

Bypassing this critical input would do nothing more than create an unnecessary overhang concerning the legality of the Commission's new CAF support mechanisms, and the use of these mechanisms to promote broadband deployment, which ultimately may have a chilling effect on carriers' desire to make their own network investment in unserved rural areas. Any delay caused by seeking the recommendations of the Joint Board would be modest. To fail to solicit and act upon the Joint Board's recommendations would be to recklessly expose to legal challenge any Commission action in this rulemaking to make broadband a supported service.

## V. THE COMMISSION SHOULD USE A COST MODEL INSTEAD OF A REVERSE AUCTION MECHANISM TO DISBURSE CONNECT AMERICA FUND SUPPORT.

In addition to the legal issues discussed in the previous section, there is an extensive record already before the Commission documenting the policy problems that are inherent in any single-winner reverse auction proposal. U.S. Cellular examines these problems in the following sections, urging the Commission not to adopt its auction proposal. Instead, as U.S. Cellular explains, the Commission—and consumers in rural and high-cost areas—would be better served by Fund disbursement mechanisms that rely on a forward-looking economic cost model.

A. Even If the Commission Had Legal Authority To Establish a Reverse Auction Mechanism, Policy Concerns Demonstrate the Need To Steer a Different Course.

A reverse auction mechanism is untested as a means of distributing universal support, and there is little reason to conclude that the Commission's gamble, if it adopts such a mechanism, will pay off. U.S. Cellular describes the various problems with reverse auctions in the following sections, and also suggests that, even if the Commission decided to use a reverse auction mechanism to provide ongoing support in the second phase of CAF, it should not experiment with

reverse auctions during the first phase of CAF. U.S. Cellular also urges the Commission not to adopt its proposal for targeting its Phase I support.

1. Using Reverse Auctions To Disburse Connect America Fund Support Would Not Be a Prudent Policy.

The Commission "seek[s] comment generally on the use of a competitive process to determine recipients of support and support amounts . . . ."<sup>72</sup> In response, U.S. Cellular reiterates a view held by numerous parties: The use of reverse auctions is a bad idea.

There is strong evidence that single-winner reverse auctions would not be effective in furthering universal service goals. The Commission thus far has neither addressed this record evidence nor put forward any reasoned case explaining why it would be prudent or advisable to gamble on reverse auctions when other reasonable options for the disbursement of CAF support are available. U.S. Cellular summarizes the manifold problems associated with reverse auctions in the following paragraphs.

First, adverse effects would result from the Commission's installing reverse auction winners as the sole funding recipients in their service areas. As U.S. Cellular has previously suggested, "[a] single-winner auction would perpetuate a monopoly . . . ." Such a result would curb competitive entry, and would reduce the beneficial effects of competition on pricing and on technological innovation. <sup>74</sup> In addition, the Commission would need to be actively engaged in

<sup>&</sup>lt;sup>72</sup> *Notice* at para. 285.

<sup>&</sup>lt;sup>73</sup> U.S. Cellular July 2010 Comments at 13.

<sup>&</sup>lt;sup>74</sup> See U.S. Cellular Dec. 2010 Comments at 19. Such a result would conflict with the Commission's broadband and competitive policies. See, e.g., Data Roaming Reconsideration Order, 25 FCC Rcd at 4182-83 (para. 3) (noting that "broadband deployment is a key priority . . . and the deployment of mobile data networks will be essential to achieve the goals of making broadband connectivity available everywhere in the United States. We also seek to foster competition [because] competition will help to promote investment and innovation and protect consumer interests."), quoted in U.S. Cellular Jan. 2011 Reply at 19.

regulating the activities of a carrier holding an auction-created dominant position in its service area.<sup>75</sup>

For example, the Commission would find it necessary to police the carrier's rates and service, to ensure comparability with rates and services in urban areas. The Commission would also be required to monitor and regulate the quality of service delivered by the auction winner to its subscribers, since there would be no competitive marketplace capable of disciplining the carrier's conduct. As U.S. Cellular has previously explained, the Commission's "assuming such a role would flatly contradict the Commission's longstanding commitment to rely on wireless marketplace competition rather than regulation to the maximum extent possible, [and] attempting to police the auction winner's anti-competitive proclivities would be a daunting task."

Second, reverse auctions as a mechanism for disbursing Fund support are untested, and there is no basis for concluding that the Commission's proposed gamble in relying on reverse auctions as a cornerstone of its universal service reform would be successful. One recent study, for example, concludes that "[u]niversal service auctions have drawn interest for decades. It does not appear, however, that there has been a single case, in the United States or elsewhere, of a successful reverse auction that allocated universal service subsidies in an area with an estab-

\_

<sup>&</sup>lt;sup>75</sup> See U.S. Cellular Dec. 2010 Comments at 21.

<sup>&</sup>lt;sup>76</sup> See, e.g., Cellular South Dec. 2010 Comments at 12; National Exchange Carrier Association, Inc., National Telecommunications Cooperative Association, Organization for the Promotion and Advancement of Small Telecommunications Companies, Eastern Rural Telecom Association, Western Telecommunications Alliance ("NECA") Comments, WT Docket No. 10-208 (filed Dec. 16, 2010) ("NECA Dec. 2010 Comments"), at 4 (footnote omitted) (noting that "[r]everse auctions will . . . encourage bidders to 'race to the bottom' in terms of service quality and sustainability, a result inconsistent with the universal service objectives of the 1996 Act"); National Exchange Carrier Association, National Telecommunications Cooperative Association, Organization for the Promotion and Advancement of Small Telecommunications Companies, Western Telecommunications Alliance, and the Rural Alliance Comments, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 05-337 (filed July 12, 2010), at 23.

<sup>&</sup>lt;sup>77</sup> U.S. Cellular Dec. 2010 Comments at 21.

lished wireline telecommunications network."<sup>78</sup> In addition, there is little reason to anticipate that any successes the Commission has achieved through its use of spectrum auctions could be readily transferred to universal service reverse auctions. As one commentator has observed, "[t]here are a number of reasons why this is not a reasonable expectation."<sup>79</sup>

Third, single-winner reverse auctions would not be effective in promoting private investment in broadband deployment. Given the inherent unpredictability of the reverse auction process, carriers would likely find it more difficult to find sources for long-term capital investments in their networks, because the extent to which carriers would have access to universal service support would be placed in doubt by the uncertainties of auction outcomes. <sup>80</sup> In addition, analysts have suggested that winners of reverse auctions have an incentive to engage in "strategic underinvestment" as a means of maximizing profits. <sup>81</sup>

Fourth, reverse auctions provide incentives for anti-competitive conduct. For example, an auction participant may have a financial incentive to win an auction at a price that would not generate a positive return, if this strategy would provide the carrier with an offsetting benefit of

<sup>78</sup> Peter Bluhm, Phyllis Bernt & Jing Liu, "State High Cost Funds: Purposes, Design and Evaluation," Nat'l Reg. Research Inst. Paper 10-04 (Jan. 19, 2010), at 54, accessed at http://nrri2.org/index.php? option=com\_content&task=view&id=46&Itemid=61.

<sup>&</sup>lt;sup>79</sup> Trevor R. Roycroft, "Reverse Auctions for Universal Service Funding?" (Feb. 1, 2008), at 3, accessed at www.roycroftconsulting.org/Roycroft\_Consulting\_Auction\_White\_Paper\_2-1-08.pdf. Dr. Roycroft explains that, with spectrum auctions (1) the resource placed up for bid was newly available; (2) the technology and services associated with the spectrum were specifically defined by the Commission; (3) the auctions were likely to exhibit "common values" among potential bidders; and (4) the "revenue potential associated with winning a license to use the new spectrum" enhanced the prospect of competitive bidding processes. *Id.* at 3-4. Dr. Roycroft concludes that "it is unlikely that auctions for universal service funding will exhibit similar characteristics." *Id.* at 4.

<sup>&</sup>lt;sup>80</sup> See NECA Dec. 2010 Comments at 4.

<sup>&</sup>lt;sup>81</sup> Christian Jaag & Urs Trinkner, "Tendering Universal Service Obligations in Liberalized Network Industries," Swiss Economics Working Paper 0013 (Jan. 2009), at 12, 17-18, accessed at http://ideas.repec.org/p/chc/wpaper/0013.html.

reducing its contribution obligation into the USF, or would eliminate support for competitors and thus improve the carrier's market position.<sup>82</sup>

Fifth, the purported reduction in the overall size of CAF support mechanisms that would be produced by the use of reverse auctions would be offset by the regulatory costs that would be imposed by reverse auctions. These costs would be imposed both on the Commission and on auction winners, and, as U.S. Cellular has discussed, would be generated by the Commission's need to police the practices of auction winners that would have a dominant position in their service areas.

Sixth, the use of a single-winner reverse auction could "have devastating long-term consequences for rural areas." In addition to depriving rural areas of the benefits of competition, the adverse effects of reverse auctions on long-term investment would harm consumers by reducing their access to advanced broadband technologies, as well as reducing their choices among mobile services. In addition, potential new entrants "would face severe disadvantages in attempting to enter a market against a subsidized carrier."

And, *seventh*, as U.S. Cellular has previously explained, although arguments could be made that auction mechanisms may potentially reduce the level of high-cost funding and generate greater efficiencies in carriers' investments and operations, "these potential benefits could very well turn out to be false economies if reverse auctions were designed and implemented in a way that fails to solve issues such as service quality, stranded investment, decreased incentives

<sup>&</sup>lt;sup>82</sup> See U.S. Cellular Dec. 2010 Comments at 22; U.S. Cellular July 2010 Comments at 15.

<sup>&</sup>lt;sup>83</sup> See RCA Dec. 2010 Comments at 7.

<sup>&</sup>lt;sup>84</sup> U.S. Cellular July 2010 Comments at 18.

<sup>&</sup>lt;sup>85</sup> *Id*.

for network investments, and barriers to financing."<sup>86</sup> The record compiled in the Commission's universal service reform proceedings supports taking this argument a step further: It is highly unlikely that the Commission could design and implement a single-winner reverse auction mechanism that would have any prospect of being successful in solving these issues.

2. The Commission Should Not Experiment with Reverse Auction Mechanisms for Phase I Connect America Fund Support, Nor Should It Bar Funding to Highest-Cost Areas.

Another issue raised by the Commission regarding its reverse auction proposals is whether it would be an appropriate objective for the first phase of CAF to "test the use of reverse auctions more generally as a longer-term means of disbursing ongoing CAF support." In U.S. Cellular's view, it would not.

Implicit in the Commission's interest in testing out its reverse auction mechanism during Phase I of CAF is its apparent view that reverse auctions represent a fundamentally sound means of disbursing CAF support, but that the mechanism should be run through some fine-tuning trials before moving on to the main event of using reverse auctions to disburse ongoing support in the second phase of CAF.

If this is in fact the Commission's view, there is no basis for it. Although the Commission has yet to come to grips with an extensive record criticizing the proposed use of reverse auctions,

<sup>&</sup>lt;sup>86</sup> U.S. Cellular Reply Comments, WC Docket No. 05-337, CC Docket No. 96-45 (filed June 2, 2008), at 58. Professor Dale Lehman has cogently explained this concern:

The literature on economic incentives stresses the difference between situations with single or multiple objectives. When multiple objectives are present then incentives for any single objective should not be too strong. Cost reduction is but one objective, and reverse auctions place a strong incentive on this dimension to the exclusion of the many other public policy objectives embodied in universal service.

Dale Lehman, "Reverse Auctions Panel Presentation to the Joint Board on Universal Service" (Feb. 20, 2007), at 6, accessed at http://www.fcc.gov/wcb/tapd/universal\_service/JointBoard/#2007.

<sup>&</sup>lt;sup>87</sup> *Notice* at para. 266.

this record (as U.S. Cellular has summarized in the previous sections) has convincingly recounted the numerous legal and policy problems inherent in the reverse auction mechanism. Rather than spending time during Phase I of CAF rearranging the deck chairs on the reverse auction mechanism, the Commission should abandon the mechanism altogether, in favor of options that would be more effective in supporting the Commission's broadband deployment goals.

Even if the Commission nonetheless concludes that it should adopt an auction mechanism as a long-term means of disbursing ongoing CAF support, U.S. Cellular urges the Commission to refrain from experimenting with auction mechanisms during the first phase of CAF. If the Commission decides to utilize an auction mechanism in connection with its proposed Mobility Fund, <sup>88</sup> then the Mobility Fund auction process would presumably be instructive as the Commission contemplates the use of reverse auctions for ongoing CAF support.

The Commission also indicates that its proposed Phase I reverse auctions would be designed to "identify and target funding to those unserved areas that could be served at the lowest cost (i.e., the lowest level of public support)." U.S. Cellular urges the Commission not to take such an approach.

The funding approach for Phase I proposed by the Commission is not appropriate because it would explicitly leave the highest-cost areas with virtually no opportunity to receive universal service support. Such a result would not appear to be in keeping with the Commission's proposed principles for guiding universal service reform.

<sup>&</sup>lt;sup>88</sup> The Commission has proposed "to use a competitive bidding mechanism to determine the entities that will receive support under the Mobility Fund and the amount of support they will receive . . . ." *Mobility Fund Notice*, 25 FCC Rcd at 14723 (para. 16). U.S. Cellular and several other parties have opposed the Commission's proposal, which currently remains pending.

<sup>&</sup>lt;sup>89</sup> *Notice* at para, 267.

While the Commission may be of the view that it would be fiscally responsible to shrink the level of funding for broadband deployment, the Commission's proposed approach would conflict with its proposed principle that "[u]nserved communities across the nation cannot continue to be left behind." The Commission's proposed approach for funding in Phase I would do exactly that, in the case of communities with the highest costs. Moreover, while the Commission's proposal may emulate market-driven results (*i.e.*, the market would not likely bring services to highest-cost areas), the Commission's principle is to pursue market-driven policies "that maximize . . . the benefits to all consumers." The Commission's proposal would not advance that principle.

Rather than zeroing out universal service support to the highest-cost areas during the first phase of CAF, it would be more appropriate for the Commission to act on revising its rules and requirements for universal service contributions as part of its near-term universal service reforms. <sup>92</sup> The Commission could generate greater levels of USF support by expanding the contribution base, and this greater level of funding could be utilized to ensure that highest-cost areas are included in the Phase I process.

\_

<sup>&</sup>lt;sup>90</sup> *Id.* at para. 10.

<sup>&</sup>lt;sup>91</sup> *Id.* The Commission explains that it recognizes "that in some geographic areas there may be no private sector business case for offering voice and broadband services. This is not in tension with our commitment to use market-driven regulation." *Id.* at para. 10, n.16.

<sup>&</sup>lt;sup>92</sup> U.S. Cellular discusses the need for universal service contribution reform in Section IX.B., *infra*.

B. If the Commission Adopts a Separate Ongoing Support Mechanism for Mobile Services, the Commission Should Not Use Reverse Auctions To Determine Support.

In connection with seeking comment on whether to provide separate, ongoing support for mobility in the second phase of CAF, the Commission suggests two potential funding options for this separate mobility funding: the use of a cost model, or the use of reverse auctions. <sup>93</sup>

U.S. Cellular generally supports the use of cost models as a basis for disbursing universal support, and will discuss the grounds for this support in the next section of these Comments.<sup>94</sup> With respect to the reverse auction proposal, the Commission specifically asks for comment regarding the possibility of "using reverse auctions *only* for mobile wireless competitive ETCs." U.S. Cellular opposes such an approach.

As U.S. Cellular has explained, <sup>96</sup> using a reverse auction mechanism for the disbursement of ongoing CAF support, while using a disbursement mechanism for rural incumbent LECs that is linked to their embedded costs, would not be competitively neutral because the rural incumbent LECs would have an understandable economic incentive to inflate their costs in order to increase the level of their CAF support. To the extent they act on these incentives, rural incumbent LECs would gain a competitive advantage over competitive ETCs.

In addition, arguments previously made in support of imposing reverse auctions exclusively on wireless competitive ETCs are not persuasive. Embarq, for example, has argued that, because growth in the Fund has been a "uniquely wireless phenomenon," and because reverse

<sup>&</sup>lt;sup>93</sup> See Notice at paras. 404-406.

<sup>&</sup>lt;sup>94</sup> See Section V.C., *infra*.

<sup>&</sup>lt;sup>95</sup> *Notice* at para. 406 (emphasis added).

<sup>&</sup>lt;sup>96</sup> See Section III.A.3., *supra*.

auctions may be a means of addressing growth in the fund, it follows that reverse auctions should only be imposed on wireless carriers.<sup>97</sup>

In addition to the possibility that reverse auctions may not actually serve effectively to curb the size of the CAF support mechanism, <sup>98</sup> the fact is that, even assuming *arguendo* that there is any basis for Embarq's allegation that wireless carriers in the past have been "uniquely" responsible for USF growth, <sup>99</sup> funding for wireless competitive ETCs has been capped since August 2008, and the years since have nonetheless seen significant increases in the universal service contribution factor. <sup>100</sup> Any strains on the Commission's high-cost funding mechanisms since the

<sup>&</sup>lt;sup>100</sup> The following table shows the growth of the contribution factor since the imposition of the interim cap in August 2008:

PERIOD	CONTRIBUTION FACTOR (%)	PERIOD	CONTRIBUTION FACTOR (%)
2008 Q4	11.4	2010Q2	15.3
2009 Q1	09.1	2010Q3	13.6
2009 Q2	11.3	2010Q4	12,9
2009 Q3	12.9	2011Q1	15,5
2009 Q4	12.3	2011Q2	14.9
2010 Q1	14.1		

<sup>&</sup>lt;sup>97</sup> Embarq Comments, WC Docket No. 05-337, CC Docket No. 96-45 (filed Apr. 17, 2008), at 15 (emphasis removed). *See* Oklahoma Corporation Commission Comments, WC Docket No. 05-337, CC Docket No. 96-45 (filed Apr. 17, 2008), at 16.

<sup>&</sup>lt;sup>98</sup> See U.S. Cellular's discussion of this issue in Section V.A.1., *supra*.

<sup>&</sup>lt;sup>99</sup> RCA has presented a convincing analysis that the high-cost mechanism was not experiencing "explosive" growth at the time the Commission imposed the interim cap on competitive ETC high-cost support, that percentage growth rates in competitive ETCs' support in the years prior to imposition of the interim cap were largely a product of the fact that competitive ETCs were new entrants that started with a baseline of zero support from the high-cost mechanism, and that growth in the fund was anticipated as a result of several actions taken by the Commission, including the Commission's fulfillment of the congressional mandate to move implicit support (from carriers' rates) into an explicit universal service funding program, the Commission's decision not to fully implement the portability of high-cost support, the Commission's decision to continue the modified embedded cost methodology for providing high-cost support to rural incumbent LECs, and the Commission's decision not to require incumbent LECs to geographically disaggregate support. RCA and Alliance of Rural CMRS Carriers Comments, WC Docket No. 05-337, CC Docket No. 96-45 (filed June 6, 2007), at 8-10. The Commission chose not to address these arguments in the *Interim Cap Order*.

imposition of the competitive ETC interim cap cannot reasonably be attributed to high-cost support provided to wireless competitive ETCs. Moreover, to the extent that the Commission takes action in this proceeding to replace the identical support rule, <sup>101</sup> as it proposes to do, <sup>102</sup> the concerns expressed by Embarq would appear to be moot.

C. Instead of Using a Reverse Auction Mechanism, the Commission Should Develop and Adopt a Cost Model for Use in Disbursing Connect America Fund Support.

As part of its alternative proposal that wireline incumbent LECs be given a right of first refusal, pursuant to which they could bypass the Commission's proposed reverse auction process and exclusively receive CAF support in their service areas, <sup>103</sup> the Commission proposes to use a cost model "developed in an open, deliberative, and transparent process" to determine the level of CAF support rural incumbent LECs would receive.

U.S. Cellular suggests that, instead of using a reverse auction mechanism for *any* disbursement of CAF support, the Commission should expand upon its cost model proposal so that a cost model would be used for *all* CAF disbursements, not merely for disbursements made to rural incumbent LECs exercising their ROFR option. As U.S. Cellular has previously observed, "[a] well designed model that targets support to high-cost areas and identifies an amount of support that is portable to all market participants who choose to enter, can serve to preserve and advance universal service, as required by the Act."<sup>105</sup>

FCC, Contribution Factor & Quarterly Filings, accessed at http://www.fcc.gov/omd/contribution-factor.html.

<sup>&</sup>lt;sup>101</sup> 47 C.F.R. § 54.307.

<sup>&</sup>lt;sup>102</sup> See Notice at para. 247.

<sup>&</sup>lt;sup>103</sup> See id. at para. 431.

<sup>&</sup>lt;sup>104</sup> *Id.* at para. 432.

 $<sup>^{105}</sup>$  U.S. Cellular July 2010 Comments at 18-19.

The Commission's proposal in the *Notice* to use a forward-looking economic cost model, for purposes of disbursing support to rural incumbent LECs exercising the ROFR option, can be said to have its origins in definitive findings made by the Commission 14 years ago in the *USF First Report and Order*. The Commission determined then that "the proper measure of cost for determining the level of universal service support is the forward-looking economic cost of constructing and operating the network facilities and functions used to provide the supported services[,]" that "in the long run, forward-looking economic cost best approximates the costs that would be incurred by an efficient carrier in the market[,]" and that "the use of forward-looking economic costs as the basis for determining support will send the correct signals for entry, investment, and innovation." The Commission also concluded that:

[T]he use of forward-looking economic cost will lead to support mechanisms that will ensure that universal service support corresponds to the cost of providing the supported services, and thus, will preserve and advance universal service and encourage efficiency because support levels will be based on the costs of an efficient carrier. <sup>109</sup>

The Commission has thus provided powerful precedent for the proposition that cost models are a superior method of accurately determining costs to be used as a basis for calculating CAF disbursements. The record currently before the Commission in this proceeding also points to nu-

<sup>&</sup>lt;sup>106</sup> USF First Report and Order, 12 FCC Rcd at 8899 (para. 224).

<sup>&</sup>lt;sup>107</sup> *Id.* (footnote omitted).

<sup>&</sup>lt;sup>108</sup> *Id.* (footnote omitted).

<sup>&</sup>lt;sup>109</sup> *Id.* at 8899 (para. 225) (footnote omitted). There is strong support for the Commission's conclusion. *See*, *e.g.*, James W. Stegeman, Steve Parsons & Mike Wilson, "The Advanced Services Model: Proposal for a Competitive and Efficient Universal Service High-Cost Approach for a Broadband World," June 2008, at 11 (footnote omitted), accessed at www.costquest.com/uploads/pdf/Exh1CostQuestJB WhitePaper.pdf (noting that "[t]he determination of forward-looking costs forms the proper foundation for sound business decisions and sound public policy decisions and is necessary for determinations of economic efficiency").

merous advantages to be gained from using a cost model.<sup>110</sup> One such advantage is that, unlike a reverse auction mechanism (which, by definition, drives competition out of markets receiving support), a forward-looking cost model works in tandem with competitive markets. As the Commission has explained, "[t]o achieve universal service in a competitive market, support should be based on the costs that drive market decisions, and those costs are forward-looking costs."<sup>111</sup>

For these reasons, the Commission should steer clear of any experimentation with untried and problematic reverse auction mechanisms, and instead proceed with the adoption of a cost model for use in disbursing CAF support. Such a decision would be well-grounded in determinations the Commission has already made regarding the utility of cost models as a basis for establishing proper levels of support.

VI. PUBLIC INTEREST BROADBAND OBLIGATIONS ADOPTED BY THE COMMISSION SHOULD TAKE CUSTOMER PREFERENCES INTO ACCOUNT, SHOULD REFLECT THE CHARACTERISTICS OF MOBILE BROADBAND NETWORKS, AND SHOULD AVOID PLACING UNWARRANTED BURDENS ON FUNDING RECIPIENTS.

As a general matter, U.S. Cellular supports various of the public interest broadband obligations proposed by the Commission, as well as the requirements the Commission proposes to ensure compliance with these obligations. In the following sections, U.S. Cellular makes several suggestions intended to enhance the Commission's oversight of fund recipients' efforts to deploy

<sup>&</sup>lt;sup>110</sup> Advantages described by U.S. Cellular, for example, can be summarized as follows: A model promotes consumer choice for consumers living in rural areas; provides marketplace certainty; can be adjusted to suit changing circumstances; reduces the possibility of anti-competitive conduct; confers no special advantage on any class of carrier or technology; and operates as an effective cap on support. U.S. Cellular July 2010 Comments at 19-20.

<sup>&</sup>lt;sup>111</sup> Federal-State Joint Board on Universal Service; Access Charge Reform, CC Docket No. 96-45, CC Docket No. 96-262, Seventh Report and Order, 14 FCC Rcd 8078, 8103 (para. 50 (1999) ("USF Seventh Report and Order").

broadband networks, and also focuses on specific steps the Commission should take to facilitate the construction of mobile broadband networks and the delivery of mobile broadband service to consumers throughout rural America.

A. The Commission Should Adopt Annual Certification Requirements To Ensure Compliance with Public Interest Broadband Obligations.

The Commission begins its discussion of public interest broadband obligations by proposing that all funding recipients should be required to file annual certifications regarding their compliance with any metrics and other obligations ultimately adopted by the Commission relating to the provision of broadband services receiving universal service support. 112

U.S. Cellular supports this proposal. The Commission currently requires ETCs subject to its jurisdiction to file annual certifications regarding compliance with various universal service requirements, <sup>113</sup> and many state commissions have established similar annual reporting and certification requirements. The Commission has not found it necessary to conclude that these annual filing requirements have been ineffective in ensuring that ETCs are meeting their obligations. If the Commission establishes the annual certifications proposed in the *Notice*, then U.S. Cellular suggests that they should be filed with the Commission, rather than with state regulatory commissions, since this would better facilitate the Commission's monitoring of compliance with any broadband metrics or other obligations it may adopt.

In U.S. Cellular's view, the Commission, as a general matter, should seek to develop data collection, reporting, and certification requirements that balance the need to ensure fund recipient accountability with the desirability of minimizing burdens on fund recipients to the extent prac-

<sup>113</sup> See 47 C.F.R. § 54.209(a)(5)-(8).

<sup>&</sup>lt;sup>112</sup> Notice at para. 122.

ticable. An annual certification requirement would accomplish this balancing because it would not impose undue burdens on fund recipients but, at the same time, would put fund recipients "on record" that they are complying with obligations associated with their provision of broadband services.

B. The Commission Should Adopt Realistic Broadband Service Metrics That Are Responsive to Consumers' Usage Characteristics and Speed Demands, and That Avoid Imposing Undue Burdens on Funding Recipients.

U.S. Cellular favors using a speed threshold of 4 Mbps (download) and 1 Mbps (upload) as a proxy for defining the capabilities of broadband, although U.S. Cellular also suggests that mobility should be defined as a separate broadband metric, and that the Commission should develop speed measurement criteria that reflect the unique nature of mobile broadband infrastructure and networks.

1. The Commission Should Set an Initial Target Speed of 4 Mbps (Download) and 1 Mbps (Upload) for Universal Service, and Should Establish Mobility as a Separate Broadband Metric.

The Commission seeks comment on the Broadband Plan recommendation that the speed threshold for broadband, for purposes of providing universal service support, should be set at 4 Mbps (actual download) and 1 Mbps (actual upload). The Commission also proposes that recipients of support in the first phase of the CAF should be required to deploy broadband networks of at least 4 Mbps (actual) downstream and 1 Mbps (actual) upstream. The Commission also proposes that recipients of support in the first phase of the CAF should be required to deploy broadband networks of at least 4 Mbps (actual) downstream and 1 Mbps (actual) upstream.

<sup>&</sup>lt;sup>114</sup> *Notice* at para. 109 (citing NBP at 135). This target would be for broadband available to residential customers. *See* Blair Levin, "In Defense of the National Broadband Plan," (Dec. 16, 2010), accessed at http://gigaom.com/2010/12/16/in-defense-of-the-national-broadband-plan/ (explaining that "the plan's 4 Mbps target is for homes, not businesses. The data we collected suggested that businesses today in most of America have no problem getting access to the speeds they need.").

<sup>&</sup>lt;sup>115</sup> *Notice* at para. 311.

U.S. Cellular supports using a 4 Mbps / 1 Mbps broadband speed threshold for purposes of disbursing CAF funds to support broadband deployment and the provision of broadband service, using actual speeds 116 as the basis for measurement. With one exception discussed below, U.S. Cellular agrees that this speed threshold should be used "as a proxy for the capabilities that consumers should be able to access with broadband . . . ."118

U.S. Cellular agrees with the objective stated in the Broadband Plan that "[e]veryone in the United States today should have access to broadband services supporting a basic set of applications that include sending and receiving e-mail, downloading Web pages, photos and video, and using simple video conferencing[,]" and with the conclusion reached in the Broadband Plan that this initial target, which "represents a speed comparable to what the typical broadband subscriber receives today, and what many consumers are likely to use in the future, given past growth rates[,]" will ensure universal access. 121

Setting the broadband speed threshold at a lower level, *e.g.*, 3 Mbps downstream and 768 kbps upstream, <sup>122</sup> might assist in lessening the financial impact on the Fund (although assertions

<sup>&</sup>lt;sup>116</sup> See id. at para. 113.

<sup>&</sup>lt;sup>117</sup> In Section VI.B.3., *infra*, U.S. Cellular suggests that speed measurements should take into account operational characteristics that are unique to mobile broadband networks.

<sup>&</sup>lt;sup>118</sup> *Notice* at para. 109.

<sup>&</sup>lt;sup>119</sup> NBP at 135.

 $<sup>^{120}</sup>$  *Id*.

<sup>&</sup>lt;sup>121</sup> U.S. Cellular has previously suggested that the Commission should use separate speed benchmarks for fixed and mobile broadband, for purposes of the Commission's annual evaluation of whether broadband is being deployed in reasonable and timely manner. U.S. Cellular Comments, GN Docket No. 10-159 (filed Sept. 7, 2010) ("U.S. Cellular Sept. 2010 Comments"), at 4-8. U.S. Cellular does not object, however, to the Commission's proposal that, for purposes of CAF funding, it would "characterize broadband without reference to any particular technology, so that current high-cost and future CAF recipients would be permitted to use any technology platform, or combination of technology platforms, that satisfies the specified metrics." *Notice* at para. 104.

<sup>&</sup>lt;sup>122</sup> See Notice at para. 110 & n.185.

to that effect are largely speculative), but the trade-off involved in pursuing what may turn out to be an ephemeral fiscal objective should be avoided by the Commission. Specifically, setting the broadband threshold as low as 3 Mbps / 768 kbps would not be an effective step in the direction of fulfilling President Obama's goals for the deployment of advanced broadband networks, including mobile broadband, nor would it be contribute to efforts to ensure that universal service support is used to assist the deployment of networks in rural and high-cost areas that are able to provide broadband Internet access at speeds comparable to those available to consumers in urban areas.

On the other hand, U.S. Cellular disagrees with suggestions that the Commission should set the initial broadband target speed at levels greater than 4 Mbps / 1 Mbps. 123 Setting the bar too high would be counterproductive, because it could close off options for accelerated deployment of advanced high-speed broadband infrastructure. There would likely be a category of carriers that could bring broadband at 4 Mbps / 1 Mbps to remote, high-cost locations, with the assistance of USF support, but that would not qualify for Fund assistance if the bar is set higher. This would not be an attractive policy outcome. In addition, concerns that 4 Mbps / 1 Mbps is too low a threshold would be addressed by treating these speeds as an initial threshold, subject to periodic revision by the Commission. As a general matter, U.S. Cellular agrees with the view expressed in the Broadband Plan that, "[w]hile the nation aspires to higher speeds . . . , it should direct public investment toward meeting this initial [4 Mbps / 1 Mbps] target." 124

<sup>&</sup>lt;sup>123</sup> See id. at para. 111.

<sup>&</sup>lt;sup>124</sup> NBP at 135.

In seeking comment on the "key attributes of broadband that will be supported as we reform the current high-cost program and create the CAF[,]" the Commission asks whether it should establish mobility as a separate metric. 126 U.S. Cellular believes that it should.

Treating mobility as a separate metric would augment establishing the advancement of the deployment of mobile networks as an independent universal service reform priority, as U.S. Cellular has recommended. <sup>127</sup> In many respects, mobility has become the biggest game in town with respect to broadband Internet access, and making mobility a metric to be taken into account as a key attribute of broadband that will supported by the Fund would be in keeping with the significant and growing demand for mobile broadband.

2. The Commission Should Not Require Funding Recipients To Engage in Periodic Testing of Their Broadband Networks.

The Commission proposes to require funding recipients to test their broadband networks in order to measure compliance with performance metrics adopted by the Commission, and to periodically report testing results to the Universal Service Administrative Company ("USAC"). The testing results would be subject to audit. 128

U.S. Cellular recognizes the importance of ensuring that broadband metrics established by the Commission are actually being met by funding recipients. Universal service funding is disbursed with the mandate and expectation that recipients will use the funding to achieve the goals and objectives adopted by the Commission for the universal service program.

<sup>&</sup>lt;sup>125</sup> *Notice* at para. 105.

<sup>&</sup>lt;sup>126</sup> *Id.* at para. 114.

<sup>&</sup>lt;sup>127</sup> See Section III.B., *supra*.

<sup>&</sup>lt;sup>128</sup> *Notice* at para. 116.

Nonetheless, it would be appropriate to design measurement requirements that balance the goal of ensuring compliance with performance metrics with the objective of minimizing as much as possible the burdens that these requirements would impose on funding recipients. In U.S. Cellular's view, broadband network testing requirements would likely impose significant burdens on funding recipients. This could be especially counter-productive if the Commission decides to adopt reverse auction mechanisms to disburse high-cost and CAF funding, because an aggregation of burdens created by the Commission's universal service rules could discourage participation in the auctions and thus threaten the workability of the Commission's new funding regime.

Instead of imposing testing and the submission of periodic reports, the Commission could require funding recipients to certify their compliance with any service quality metrics the Commission may adopt. These certification requirements, together with "customer complaints regarding the quality of their broadband[,]" should be sufficient for enforcing service quality.

3. The Commission Should Use Speed Measurement Criteria That Account for the Unique Characteristics of Mobile Broadband Networks.

If the Commission decides to adopt a specific threshold speed requirement for supported broadband services, one issue it must address involves the manner in which broadband speed will be measured. As part of its examination of this issue, the Commission seeks comment about how to measure speeds for networks that provide mobile services, where capacity per user changes over time as the number of users in a given sector increases and decreases.

<sup>&</sup>lt;sup>129</sup> *Id*.

<sup>&</sup>lt;sup>130</sup> See id. at para. 117.

<sup>&</sup>lt;sup>131</sup> *Id*.

If the Commission applies a specific speed requirement for mobile broadband services, then, as the Commission suggests, it would be important for measurement criteria to account for the unique characteristics of mobile broadband networks. A prominent characteristic is the fact that mobile broadband networks are periodically subject to congestion, which can have a temporary effect on broadband speeds available to end users.

One method the Commission could use to account for the unique characteristics of mobile networks would be for the Commission to rely on average sector throughput as a means of qualifying any strict application of specific speeds requirements for supported mobile broadband services. Motorola has explained that "[t]he average sector throughput is the aggregate of the individual user data rates and is used to quantify the total capacity of a site or sector. In other words, this is the total number of bits capable of being delivered to users distributed through the sector coverage area." <sup>132</sup>

The average sector throughput measurement accounts for the number of concurrent users on a mobile broadband provider's network, and also reflects other factors that may affect individual user throughput, such as distance from the cell site and interference. <sup>133</sup> The Motorola White Paper concludes that:

Average sector throughput is the measure that best represents the capacity of a sector serving all users in a real world environment. Engineers will often use average sector throughput during system design to determine if they have designed in enough network capacity to support the expected traffic in a geographic area. <sup>134</sup>

<sup>&</sup>lt;sup>132</sup> Motorola White Paper, "Real-World LTE Performance for Public Safety" (Sept. 2010), at 4 ("Motorola White Paper"), accessed at <a href="http://www.motorola.com/Business/US-EN/BMS\_Site\_Search?q=real-world+lte+performance&onsite=1">http://www.motorola.com/Business/US-EN/BMS\_Site\_Search?q=real-world+lte+performance&onsite=1</a>. U.S. Cellular suggests that it would be appropriate to measure average sector throughout at the physical (PHY) layer, and the media access control (MAC) sublayer of the mobile broadband network.

<sup>&</sup>lt;sup>133</sup> *Id*.

<sup>&</sup>lt;sup>134</sup> *Id*.

In U.S. Cellular's view, it would be unrealistic for the Commission to apply a broadband speed threshold to mobile networks based upon individual user measurements. The Commission should instead rely upon average sector throughput measurements, based network key performance indicators, that would produce a more reliable of applying the Commission's speed threshold in a mobile broadband network environment.

- C. The Commission's Requirements Regarding Affordable and Reasonably Comparable Rates Should Avoid Direct Rate Requirements Imposed on Funding Recipients, and Should Take Consumers' Preferences into Account.
  - 1. The Commission Should Follow the Model It Has Used for Voice Services in Determining the Affordability of Broadband Services.

One of the central tasks for the Commission in this proceeding is devising universal service reforms that will be effective in bringing *affordable* broadband to rural and high-cost areas. The Act charges the Commission with developing policies aimed at making supported services available at "affordable rates." In keeping with this statutory mandate, one of the goals established in the Broadband Plan is that "[e]very American should have *affordable* access to robust broadband service..." 136

U.S. Cellular has previously advocated that the Commission should collect pertinent information regarding the affordability of mobile broadband, noting that "[g]athering data regarding the affordability of mobile wireless broadband services—especially in rural and high-cost

[T]he current regulatory framework will not close the broadband availability gap. A comprehensive reform program is required to shift from primarily supporting voice communications to supporting a broadband platform that enables many applications, including voice. . . . The goal of reform is to provide everyone with *affordable* voice and broadband.

Id. at 141 (emphasis added).

<sup>&</sup>lt;sup>135</sup> 47 U.S.C. § 254(b).

<sup>&</sup>lt;sup>136</sup> NBP at 10 (emphasis added). The Broadband Plan also finds that:

areas—will provide useful information to the Commission, which can be utilized, for example, in the development of the Commission's universal service policies." <sup>137</sup>

The Commission seeks comment on the types of information upon which it should rely in evaluating whether rates for supported broadband and voice services are affordable. <sup>138</sup> U.S. Cellular suggests that the Commission should take an approach patterned after the manner in which it currently evaluates the affordability of voice services. Thus, the Commission could treat the overall subscribership penetration rate for fixed broadband and mobile broadband services <sup>139</sup> as probative with respect to the affordability of broadband. In addition, the Commission could seek to determine trends in the level of average consumer expenditures for fixed broadband and mobile broadband services, as a further indication of the affordability of these services. <sup>140</sup>

While the Commission expresses some concerns regarding whether its methods of assessing the affordability of voice services would be sufficiently applicable to broadband services, <sup>141</sup> U.S. Cellular believes that the criteria described above would still provide a workable indication of whether broadband rates are affordable. Moreover, the Commission's concerns that variables other than affordability affect broadband subscribership penetration (*e.g.*, lack of computers, lack of digital literacy, a belief that broadband is not relevant)<sup>142</sup> may be pertinent regarding fixed

<sup>&</sup>lt;sup>137</sup> U.S. Cellular Sept. 2010 Comments at 17.

<sup>&</sup>lt;sup>138</sup> See Notice at para. 140.

<sup>&</sup>lt;sup>139</sup> U.S. Cellular has previously suggested that the Commission, in evaluating the affordability of broadband, should gather information regarding mobile broadband services, arguing that "[t]here is a compelling basis for the Commission to examine the affordability of mobile wireless broadband services, as part of an overall assessment of broadband affordability, because mobile broadband is indisputably a 'desired' service from the perspective of consumers." U.S. Cellular Sept. 2010 Comments at 16.

<sup>&</sup>lt;sup>140</sup> See Notice at para. 140.

<sup>&</sup>lt;sup>141</sup> See id. at para. 141.

<sup>&</sup>lt;sup>142</sup> *Id*.

broadband, but would seem to be less pertinent in the case of mobile broadband. The growing demand for smartphones and tablets, <sup>143</sup> for example, suggests that the variables mentioned by the Commission have less application in the mobile broadband world.

In developing affordability criteria, the Commission should not impose any specific affordability requirements on funding recipients. <sup>144</sup> It would be counter-productive, burdensome, and administratively infeasible to attempt to measure affordability on a recipient-by-recipient basis. In addition, any such approach could conflict with the Commission's intent "not to price regulate broadband service . . . ." <sup>145</sup>

While U.S. Cellular supports measurement criteria that would assess affordability "based on the totality of the Commission's universal service programs," it is U.S. Cellular's view that it would be neither feasible nor desirable "to implement a system where support is available only to subsidize the cost of serving customers under a specified income level . . ." Such an approach would not be consistent with a fundamental universal service goal, which is to support the deployment of networks to provide voice and broadband service to "all the people of the United States . ." In addition, a funding mechanism limited to supporting the provision of service to low-income subscribers would likely undercut incentive for deploying broadband networks in rural and high-cost areas, which would not advance the Commission's proposed principle of

<sup>&</sup>lt;sup>143</sup> Chairman Genachowski has noted that "[t]he bottom line [is that] mobile broadband is being adopted faster than any computing platform in history. The number of smartphones and tablets sold now exceeds the number of PCs." Chairman Genachowski Remarks at 5.

<sup>&</sup>lt;sup>144</sup> See Notice at para. 143.

<sup>&</sup>lt;sup>145</sup> *Id.* at para. 138.

<sup>&</sup>lt;sup>146</sup> *Id.* at para. 140.

<sup>&</sup>lt;sup>147</sup> *Id.* at para. 142.

<sup>&</sup>lt;sup>148</sup> 47 U.S.C. § 151.

modernizing and refocusing its universal service program "to make affordable broadband available to *all Americans* . . . ."<sup>149</sup>

2. The Commission Should Adopt an Aggressive Standard for Broadband Rate Comparability, and Should Take Both Rates and Services into Account.

In addressing rate comparability, the Commission should follow the approach it has taken for purposes of providing high-cost support for non-rural carriers by establishing a national rate benchmark based on average urban rates. Rural rates in a given state would be presumed to be reasonably comparable to urban rates, for purposes of Section 254 of the Act, if they are below the nationwide benchmark.

U.S. Cellular suggests, however, that, instead of using the national rate benchmark currently used for voice services provided by non-rural carriers (*i.e.*, 2.0 standard deviations above the average urban rate), <sup>150</sup> the Commission should base reasonable comparability on a fixed numerical standard that is more aggressive than the benchmark the Commission currently uses for non-rural carriers. Using a fixed numerical standard would provide a clear-cut test, thus removing any ambiguity or uncertainty. <sup>151</sup> Specifically, the Commission should adopt a benchmark of not more than 125 percent of nationwide urban rates. Using this benchmark (which would constitute a reduction from the 2.0 standard deviation benchmark), and providing federal support

<sup>&</sup>lt;sup>149</sup> *Notice* at para. 10 (emphasis added).

<sup>&</sup>lt;sup>150</sup> High-Cost Universal Service Support Federal-State Joint Board on Universal Service, WC Docket No. 05-337, Joint Petition of the Wyoming Public Service Commission and the Wyoming Office of Consumer Advocate for Supplemental Federal Universal Service Funds for Customers of Wyoming's Non-Rural Incumbent Local Exchange Carrier, CC Docket No. 96-45, Order on Remand and Memorandum Opinion and Order, 25 FCC Rcd 4072, 4109 (para. 70) (2010) ("Qwest II Remand Order").

<sup>&</sup>lt;sup>151</sup> See Vermont Public Service Board, Vermont Department of Public Service, and Maine Public Utilities Commission Comments, CC Docket No. 96-45, WC Docket No. 05-337 (filed Mar. 27, 2006) at 29; RCA Comments, Docket No. 96-45, WC Docket No. 05-337 (filed Jan. 28, 2010) ("RCA Jan. 2010 Comments") at 18.

above that threshold, would advance the Commission's goals for broadband deployment because doing so likely would not tolerate as wide a gap between rural and urban rates than would be permitted by the 2.0 standard deviation benchmark.<sup>152</sup>

The Commission's discussion of reasonable comparability in the *Notice* focuses on broadband *rates*, <sup>153</sup> but the principle of reasonable comparability enacted by Congress in Section 254(b)(3) of the Act applies not only to rates, but also to "telecommunications and information *services*, including . . . advanced telecommunications and information *services* . . . ." <sup>154</sup> In order to follow this statutory mandate, the Commission should develop CAF support mechanisms that are:

directed toward the services—such as mobile broadband services—that consumers are embracing in today's rapidly-changing marketplace. Mobile services, and more specifically, mobile broadband services, are broadly available in urban areas and highly valued by all consumers. Thus, rural consumers have a right to expect the universal service system to ensure their access to wireless services that are "comparable" to those provided in urban areas. <sup>155</sup>

U.S. Cellular agrees with RCA that an effective way for the Commission to meet this statutory mandate regarding reasonably comparable services is to ensure that the new CAF support me-

<sup>&</sup>lt;sup>152</sup> See Letter from R. Steven Davis, Senior Vice President – Federal Relations, and Shirley Bloomfield, Senior Vice President – Public Policy, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, WC Docket No. 05-337 (filed May 5, 2008), Proposal for Implementing the Tenth Circuit's Remand in *Qwest Communications Int'l Inc. v. FCC*, 398 F.3d 1222 (10th Cir. 2005)), at 4, *cited in* RCA Jan. 2010 Comments at 19. Although the Commission last year decided not to modify the 2.0 standard deviation benchmark used for non-rural carriers' voice services, the Commission did acknowledge that the 2.0 standard deviation benchmark produces a gap of 34-43 percent between rural and urban rates, compared to a 25 percent difference that would be produced by a 125 percent benchmark. *Qwest II Remand Order*, 25 FCC Rcd at 4110 (para. 71). While the Commission found that this difference between the two standards was "not dramatically dissimilar[,]" *id.*, U.S. Cellular suggests that such a degree of difference does in fact warrant serious consideration of the 125 percent benchmark.

<sup>&</sup>lt;sup>153</sup> *See Notice* at paras. 144-147.

<sup>&</sup>lt;sup>154</sup> 47 U.S.C. § 254(b)(3) (emphasis added).

<sup>&</sup>lt;sup>155</sup> CTIA Comments, WC Docket No. 05-337, CC Docket No. 96-45 (filed May 8, 2009), at 8-9.

chanisms provide sufficient funding for competitive broadband services. <sup>156</sup> One step toward that goal would be accomplished by adopting U.S. Cellular's proposal for separate CAF funds to provide ongoing support for fixed broadband and mobile broadband services.

In addition to seeking comment on how to measure whether rural and urban broadband rates are reasonably comparable, the Commission also asks whether it "should look at rates for voice and broadband individually, or combined." There are strong reasons for applying the comparability test to combined voice and broadband rates. Providing for the inclusion of both voice and broadband services in the Commission's comparability analysis would reflect the current realities of the marketplace, and would better ensure that consumers in rural and high-cost areas have access to service packages—including mobile voice and mobile broadband— that are comparable to those commonly available to consumers in urban areas. <sup>158</sup>

Finally, in connection with its consideration of actions that should be taken to ensure the reasonable comparability of rural and urban broadband rates, the Commission seeks comment on whether it "should require recipients to file with the Commission rates that [they] will charge customers for a set period after receiving funding." <sup>159</sup> U.S. Cellular opposes such a filing requirement as being burdensome and unnecessary. The complaint process could be utilized to protect consumers against unreasonable rates. Moreover, if the Commission adopts CAF mechanisms that encourage competitive entry, then the resulting competition would further discipline broadband rates. The filing of rates with the Commission would not serve any discernible purpose, and, therefore, the potentially burdensome requirement should not be imposed.

\_

<sup>&</sup>lt;sup>156</sup> RCA Jan. 2010 Comments at 19-20.

<sup>&</sup>lt;sup>157</sup> Notice at para. 144.

<sup>&</sup>lt;sup>158</sup> See RCA Jan. 2010 Comments at 21.

D. Fund Recipients Should Be Permitted To Partner with Other Providers To Meet Requirements Related to the Provision of Voice Services.

The Commission, in proposing to require that fund recipients must provide voice telephony service throughout their designated service areas, also proposes to permit fund recipients "to partner with another voice provider, in part, to provide voice capability . . . ."<sup>160</sup>

If the Commission ignores the warnings of U.S. Cellular and proceeds with the establishment of a single-winner reverse auction disbursement mechanism, then U.S. Cellular believes the Commission has no choice but to permit partnering between the auction winner and other providers of voice telephony service. The partners should be permitted to provide voice service through the use of any technology, including wireless and satellite networks, so long as the technology employed is able to deliver a service that meets the Commission's definition of a voice telephony service.

Permitting partnering arrangements would benefit consumers by facilitating more accelerated access to voice services in areas in which such services are not ubiquitously available. In addition, partnering would be more cost effective (and, thus, would place less pressure on the Fund) than requiring fund recipients to deploy their own facilities as the exclusive means for complying with the Commission's requirements regarding the availability of voice services in the recipients' service areas.

VII. THE COMMISSION SHOULD ADOPT NEAR-TERM UNIVERSAL SERVICE REFORMS THAT PROMOTE EFFICIENCY AND COMPETITIVE NEUTRALITY.

As the Commission proceeds with reform of support provided to competitive ETCs and rural incumbent LECs, it should take several steps to ensure that its adjustments to current me-

<sup>&</sup>lt;sup>159</sup> *Notice* at para. 147 (footnote omitted).

chanisms, and its plans for transitioning to its new CAF support mechanisms, are competitively neutral manner. These various steps are discussed in the following sections.

A. The Commission Should Rationalize Competitive ETC Support in a Manner That Accounts for the Accelerating Demand for Mobile Broadband in Rural Areas.

The extent to which the Commission will be able to deliver on commitments regarding the provision of mobile broadband service to all Americans will depend in large part on the new support mechanisms the Commission adopts, and on the manner in which the Commission designs and manages the transition to these new mechanisms. In the following sections, U.S. Cellular explains that there are reasons to be concerned about the Commission's proposals, and suggests several remedial steps that would better achieve the Commission's policies regarding the deployment of mobile broadband networks.

1. Phased-Down Competitive ETC Support Should Not Be Used To Reduce the Overall Level of High-Cost Support.

As part of its proposal to phase down existing competitive ETC high-cost support over a four-year period beginning in 2012, <sup>161</sup> the Commission asks whether it should use this funding to reduce the size of the Fund. <sup>162</sup> Such an approach would be ill-advised.

On the one hand, U.S. Cellular supports the Commission's proposed principle of fiscal responsibility, including the Commission's commitment to "[c]ontrol the size of USF as it transitions to support broadband . . . ."<sup>163</sup> On the other hand, the Commission has a responsibility to

<sup>&</sup>lt;sup>160</sup> *Id.* at para. 98.

<sup>&</sup>lt;sup>161</sup> *Id.* at para. 248. U.S. Cellular notes that, although the Commission characterizes its proposal as a "five-year" phase down, since support is at zero at the beginning of the fifth year, it is actually a four-year phase down.

<sup>&</sup>lt;sup>162</sup> *Id.* at para. 249.

<sup>&</sup>lt;sup>163</sup> *Id.* at para. 10.

ensure that the size of the Fund is sufficient to achieve the statute's universal service goals and objectives. <sup>164</sup> As U.S. Cellular has previously explained, "Congress gave the Commission a set of goals and ordered that universal service support be sufficient to achieve them. If the Commission cannot develop sufficient contribution mechanisms to meet congressional goals—then Congress must step in and amend the statute to sustain the program." <sup>165</sup>

Given the Commission's responsibility to maintain the sufficiency of the Fund, the Commission should not use phased-down competitive ETC high-cost support to reduce the size of the Fund, for two reasons. *First*, there is no credible evidence that such a reduction is necessary. While the Commission has expressed general concerns regarding the possible relationship between unchecked Fund growth and possible downward pressures on the adoption of broadband services and other services, <sup>166</sup> there does not appear to be any probative empirical data suggesting that immediate steps must be taken to reduce the size of the Fund in order to avoid these speculative consequences. While U.S. Cellular agrees that fiscal responsibility should be exercised to ensure that future growth in the Fund is managed prudently, these fiscal concerns do not reasonably translate into a basis for cutting the size of the Fund in the near term.

Second, any such reduction in the Fund would risk jeopardizing the whole point of universal service reform and the Commission's Broadband Plan: "Modernize and refocus USF and ICC to make affordable broadband available to all Americans and accelerate the transition from circuit-switched to IP networks . . . . Unserved communities across the nation cannot continue to

<sup>164</sup> See 47 U.S.C. § 254(b)(5) (establishing the principle that "[t]here should be . . . sufficient Federal and State mechanisms to preserve and advance universal service").

<sup>&</sup>lt;sup>165</sup> U.S. Cellular Dec. 2009 Comments at 9.

<sup>&</sup>lt;sup>166</sup> See Notice at para. 10 (noting that "American consumers and businesses ultimately pay for USF, and . . . this contribution burden may undermine the benefits of the program by discouraging adoption").

be left behind." <sup>167</sup> Achieving these goals takes money. As U.S. Cellular has previously observed, if the Commission chooses to accelerate the deployment of broadband infrastructure, including mobile broadband networks, then the Commission's funding mechanisms should grow to help fund this investment:

The biggest near-term investment for mobile wireless broadband is towers and related infrastructure, which have a relatively long lifespan. Long-term, the overall size of the high-cost support mechanism may be reduced because operations and maintenance expenses are lower than the initial construction expenses. Accordingly, the overall size of the fund should be looked at from the perspective of how quickly the Commission seeks to achieve a robust build out of new infrastructure in rural America. From U.S. Cellular's perspective, the fund needs to get bigger before it gets smaller, to accelerate new investment in more efficient plant, that can be operated and maintained at lower [funding] levels in future years. 168

2. Competitive ETCs Should Be Permitted To Immediately Invest Existing Support in Mobile Broadband Infrastructure.

As the Commission evaluates the rationalization of competitive ETC universal service support, one immediate step it should consider is to clarify and confirm that competitive ETCs (as well as incumbent ETCs) are permitted under existing law to use their current high-cost funding to deploy joint-use network facilities that are capable of providing both voice and broadband services.

The Commission is not barred by Section 254 of the Act from funding such joint-use facilities, <sup>169</sup> and a clarification by the Commission that competitive ETCs may use current high-

<sup>&</sup>lt;sup>167</sup> *Id*.

<sup>&</sup>lt;sup>168</sup> U.S. Cellular Dec. 2009 Comments at 10 (emphasis in original) (footnote omitted).

<sup>&</sup>lt;sup>169</sup> See Federal-State Joint Board on Universal Service, Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers, CC Docket No. 96-45, CC Docket No. 00-256, Fourteenth Report and Order, Twenty-Second Order on Reconsideration, and Further Notice of Proposed Rulemaking in CC Docket No. 96-45, and Report and Order in CC Docket No. 00-256, 16 FCC Rcd 11244, 11322 (para. 200) (2001) (concluding that the "use of support to invest in infrastructure capable of providing access to advanced services does not violate section 254(e), which mandates that support be used 'only for the provision, maintenance, and

cost funding for joint-use mobile broadband networks "would be an effective, immediate action to accelerate broadband deployment in rural and high-cost areas. Such a step would enable wireless ETCs to enhance their investment in broadband networks in the near term, while the Commission continues its deliberations regarding long-term universal service reform." <sup>170</sup>

3. Support to Competitive ETCs Should Not Be Phased Down Before a Successor Funding Mechanism Is in Place.

Another important step the Commission should take, as a means of advancing its goals for the accelerated deployment of mobile broadband networks and for the availability of affordable mobile broadband services in rural communities, is to ensure that a phase down of competitive ETCs' existing high-cost support is not commenced until replacement funding mechanisms have been adopted and have been made operational.

U.S. Cellular has previously argued that "the Commission must be prepared to disburse support from new funding mechanisms before it initiates the phase-down of existing support for competitive ETCs (or for incumbent LECs)[,]" and that such an approach is necessary to avoid the risk of there being insufficient funding for the accelerated deployment of broadband networks. The Commission has explained that "[r]eform will require all major stakeholders in the USF and ICC system to grapple with the practical consequences of change. We do not propose any 'flash cuts,' but rather suggest transitions and glide paths that we believe will facilitate

upgrading of facilities and services for which the support is intended.' The public switched telephone network is not a single-use network. Modern network infrastructure can provide access not only to voice services, but also to data, graphics, video, and other services. High- cost loop support is available to rural carriers 'to maintain existing facilities and make prudent facility upgrades . . . .' Thus, although the high-cost loop support mechanism does not support the provision of advanced services, our policies do not impede the deployment of modern plant capable of providing access to advanced services.").

<sup>&</sup>lt;sup>170</sup> U.S. Cellular Sept. 2010 Comments at 37.

<sup>&</sup>lt;sup>171</sup> U.S. Cellular Aug. 2010 Reply at 33.

adaptation to reforms."<sup>172</sup> A phase-down of support, in the absence of the implementation of new CAF support mechanisms, may not constitute a "flash-cut" change in the strictest sense, but it would have the same effect on competitive ETCs because their ability to continue using USF support to deploy infrastructure and provide services would be disrupted.

U.S. Cellular agrees with CTIA that any Commission decision that would eliminate high-cost support for wireless carriers "before developing and implementing any alternative mechanisms to support mobile voice or broadband deployment in rural areas [would be] far off the mark." Cutting back current high-cost support would likely decrease investment by competitive ETCs in rural and high-cost areas, delay network upgrades, and adversely affect competitive ETCs' coverage areas. None of these outcomes, of course, would benefit consumers. <sup>174</sup>

4. All Support Provided Under Existing Mechanisms Should Be Phased Down on Identical Time Lines.

U.S. Cellular has explained in an earlier section of these Comments that a failure by the Commission to transition both rural incumbent LECs and competitive ETCs from their existing support to new CAF support mechanisms pursuant to the same or equivalent terms would not be competitively neutral. <sup>175</sup> In this section, U.S. Cellular underscores its concern that the Commission's goals for broadband deployment will be threatened unless it develops fair and practical transition mechanisms.

<sup>&</sup>lt;sup>172</sup> *Notice* at para. 17. The Commission went on to point out that "[c]hange to USF and ICC policies need not and should not be sudden or overly disruptive, but change must begin so that our country can reach its broadband goals in an efficient and accountable way." *Id*.

<sup>&</sup>lt;sup>173</sup> CTIA July 2010 Comments at 7.

<sup>&</sup>lt;sup>174</sup> See id. U.S. Cellular agrees with CTIA's conclusion that, "[b]ased on both wireless carriers' legitimate reliance on existing mechanisms, as well as the need to preserve wireless service to meet broadband and voice service goals going forward, the Commission should not begin phasing out existing CETC support until rules for new support mechanisms are finalized." *Id.* at 8.

<sup>&</sup>lt;sup>175</sup> See Section III.A.2., *supra*.

If the Commission were to proceed with an accelerated phase down of wireless carriers' support, this would only reduce the ability of wireless competitive ETCs to construct new cell sites in remote areas. This would be a counter-productive result, especially given that substantial areas of rural America still require significant capital investment in order to gain access to broadband services. At a time when the President and the Chairman are pushing to deliver mobile broadband services to 98 percent of Americans within five years, it would be exactly the wrong policy choice to phase down support to the very carriers who are using support to build towers and coverage in rural areas.

Moreover, there is no indication in the Broadband Plan or the *Notice* that the Commission is coordinating any phase down of support to competitive ETCs with the introduction of new broadband support mechanisms. That is essential to ensuring that existing services are not cut and that new broadband services roll out at the earliest possible date.

These problems that the Commission's proposed transition would cause for competitive ETCs would be exacerbated if transition rules for rural incumbent LECs are not aligned with those required of competitive ETCs. To the extent that the Commission's universal service policies continue to be designed to work in tandem with policies aimed at advancing local competition (as they are required to do), then the Commission must also prescribe transition paths that do not place competitive ETCs (or rural incumbent LECs) at a competitive disadvantage. Specifically, U.S. Cellular favors the adoption of a ten-year phase-down of wireless competitive ETCs'

high-cost support, with comparable phase-down periods applied for purposes of transitioning rural incumbent LECs to the Commission's new USF mechanisms. 176

5. The Commission Should Not Accelerate the Phase-Down of Competitive ETC Support by Treating a Wireless Family Plan as a Single Line for Purposes of Support Calculations.

The Commission seeks comment on a Broadband Plan proposal to accelerate the phase down of competitive ETC support by immediately treating a wireless family plan as a single line for purposes of support calculations.<sup>177</sup>

U.S. Cellular opposes the Broadband Plan recommendation because it would not be competitively neutral, it would amount to a flash-cut of competitive ETC support, and, in any event, there is no rational basis to support the recommendation.

As U.S. Cellular has discussed, <sup>178</sup> the Commission should design transition mechanisms for rural incumbent LEC and competitive ETC support that are competitively neutral. Singling out the treatment of wireless family plans as an immediate means of imposing further reductions on competitive ETCs' high-cost support (in addition to the ongoing reductions resulting from the imposition of the interim cap three years ago) would not be consistent with the competitive neutrality principle. In addition, while the Commission professes that it is not proposing any flash cuts, <sup>179</sup> redefining wireless family plans as a single line for purposes of support calculations would in fact result in a flash cut of competitive ETC support. Given the Commission's interest

<sup>&</sup>lt;sup>176</sup> See *id*. The Broadband Plan notes that "[b]y 2020, the 'old' High-Cost program will cease operations, and service providers will only receive support for deployment and provision of supported services (i.e., broadband that offers high-quality voice) through the CAF." NBP at 150.

<sup>&</sup>lt;sup>177</sup> Notice at para. 257 (citing NBP at 148).

<sup>&</sup>lt;sup>178</sup> See Section VII.B.4., *supra*.

<sup>&</sup>lt;sup>179</sup> *Notice* at para. 17.

in avoiding such results as it devises its universal service reforms, it should dispense with the NBP recommendation on that basis. 180

In addition, the Broadband Plan proposal stems from a false premise, namely, that there is some basis for treating wireless family plans as the equivalent of a single line. The Broadband Plan offers no explanation or support for this premise, other than to indicate that "in many instances, companies receive support for multiple handsets on a single family plan. Given the national imperative to advance broadband, subsidizing this many competitive ETCs for voice service is clearly inefficient." <sup>181</sup>

The Broadband Plan, in hastening to identify funding sources for the national imperative, overlooks the way wireless networks are designed and operated. Given the fact that each wireless handset in a family plan provides a *mobile* service, a competitive ETC must build and maintain infrastructure that supports the use of *each* of the handsets *anywhere* in the competitive ETC's service area. Thus, each handset is reasonably viewed as a separate "line" for which mobile service must be ubiquitously available. Given the competitive ETC's responsibility for making service available for each family plan "line," each line should be eligible for support.

In addition, as CTIA has pointed out, there are legal problems with the Broadband Plan recommendation. Since the recommendation could result in immediate and dramatic reductions in competitive ETC support, <sup>182</sup> the flash cut would conflict with the statutory requirement that

<sup>&</sup>lt;sup>180</sup> In fact, the Broadband Plan itself observes that "[s]udden changes in USF . . . could have unintended consequences that slow progress" and that the Commission should instead provide "a clear road map for reform . . . so that the private sector can react and plan appropriately." NBP at 141.

<sup>&</sup>lt;sup>181</sup> *Id.* at 148 (footnote omitted).

<sup>&</sup>lt;sup>182</sup> See Notice at para. 148 (referencing an estimate of \$463 million annually).

USF mechanisms must be predictable.<sup>183</sup> U.S. Cellular also agrees with CTIA's observation that "the [NBP] proposal would run afoul of the clear Congressional prohibition on restricting universal service support to a 'primary line.'"<sup>184</sup>

B. The Commission Should Gradually Transition Interstate Access Support to the Connect America Fund.

The Commission seeks comment on whether the Interstate Access Support ("IAS") funding level for incumbent LECs adopted in the *Interim Cap Order* should be capped in 2012 at 50 percent of the 2011 IAS cap amount and then eliminated in 2013, or whether IAS support should be transitioned to CAF more gradually. <sup>185</sup>

U.S. Cellular favors a gradual transition of IAS funding to the new CAF mechanisms, in order to minimize disruption to the operations of service providers. Many competitive ETCs receive IAS support, and, in several states (such as New Mexico, Virginia, Washington, and West Virginia) this IAS support represents a significant portion of all universal service support received by competitive ETCs. <sup>186</sup> The transition should not commence until the Commission is prepared to begin the disbursement of support from new CAF mechanisms, and the transition should subsequently proceed gradually at a pace that is synchronized as much as possible with the ramp up of CAF funding. <sup>187</sup> For example, applying a ten-year period for transitioning IAS to

<sup>&</sup>lt;sup>183</sup> CTIA July 2010 Comments at 12 (citing 47 U.S.C. § 254(b)(5)).

<sup>&</sup>lt;sup>184</sup> *Id.* (citing various congressional appropriations Acts prohibiting the Commission from using appropriated funds to implement primary line restrictions).

<sup>&</sup>lt;sup>185</sup> Notice at para. 234.

<sup>&</sup>lt;sup>186</sup> See U.S. Cellular July 2010 Comments at 27-28.

<sup>&</sup>lt;sup>187</sup> See U.S. Cellular Aug. 2010 Reply at 33.

CAF would be an appropriate glide path that would minimize disruptions that could be caused by a more accelerated transition. 188

The Commission proposes to transition IAS for competitive ETCs on the same schedule adopted for incumbent price cap carriers. U.S. Cellular supports transitioning all current recipients of IAS support on the same schedule, since such an approach would avoid imposing any competitive advantage or disadvantage on any class of carrier. U.S. Cellular also reiterates that the duration of the schedule should be sufficient to avoid disruption to the operations of any class of carriers receiving IAS support.

VIII. RULES FOR THE FIRST PHASE OF THE CONNECT AMERICA FUND SHOULD PROVIDE SUFFICIENT LEVELS OF FUNDING, AND SHOULD DEVELOP EFFECTIVE MEASURES FOR TARGETING SUPPORT.

The Commission can take steps during the first phase of CAF, including adopting rules for disaggregating support within study areas and for beginning the process of redrawing existing study areas, which will promote more efficient and effective use of CAF funding. If the Commission decides to cap the level of support during the first phase of CAF, it should do so in a way that still accommodates sufficient funding for the deployment of mobile broadband networks. The Commission also should be cautious in selecting criteria for use in defining areas that would receive support during Phase I, because its proposals appear to be inconsistent with statutory requirements.

<sup>&</sup>lt;sup>188</sup> U.S. Cellular also supports a ten-year phase-down of competitive ETCs' existing high-cost support. See, for example, Section VII.A.4., *supra*.

<sup>&</sup>lt;sup>189</sup> Notice at para. 237.

<sup>&</sup>lt;sup>190</sup> The Commission also asks whether the IAS transition should be accomplished more slowly for certain classes of carriers. *Id.* at para. 234. Because this could have adverse competitive consequences, U.S. Cellular opposes such an approach.

A. If the Commission Sets a Budget for Funding for the First Phase of the Connect America Fund, the Budget Should Be Flexible and Subject to Upward Adjustment.

The Commission proposes to "dedicate a defined amount of money to fund the first phase of the CAF[,]" and, specifically, seeks comment on an overall budget for CAF "such that the sum of any annual commitments for the CAF and any existing high-cost programs (as modified) in 2012 would be no greater than projections for the current high-cost program, absent any rule changes." <sup>192</sup>

U.S. Cellular has suggested that the Commission would be better advised not to initiate a first phase of CAF in which the Commission would plan to test its proposed reverse auction mechanism. <sup>193</sup> The Commission could better serve its universal service goals by avoiding any rigid budgetary restrictions on CAF and "continuing to provide IAS and competitive ETC support under current program rules." <sup>194</sup> Such an outcome would be better for consumers because it would enhance continuity, and mitigate any dislocations, in the deployment of broadband infrastructure and provision of services in rural and high-cost areas.

If the Commission, however, decides to establish a budget for Phase I CAF, the budget should not be locked in place, but should instead be flexible and subject to adjustment. As a general matter, allowing pre-determined budget ceilings to drive the extent of the Commission's efforts to support broadband deployment amounts to allowing the tail to wag the dog. As U.S. Cellular has discussed in other sections of these Comments, the Commission's proposed principle regarding fiscal responsibility should not be allowed to devour the proposed principle of bringing

<sup>&</sup>lt;sup>191</sup> *Notice* at para. 274.

<sup>&</sup>lt;sup>192</sup> *Id.* at para. 275.

<sup>&</sup>lt;sup>193</sup> See Section V.A.2., *supra*.

affordable broadband to all Americans. In addition, the imposition of a fixed budget ceiling would risk a conflict with the statutory requirement regarding the sufficiency of universal support mechanisms.

These considerations, as well as the Commission's concerns regarding "the high costs that would be required to ensure ubiquitous mobile coverage and very-high-speed broadband for every American[,]" support U.S. Cellular's suggestion that the Commission should be prepared to make upward adjustments in any Phase I budget it adopts, in order to accommodate these costs. A failure to make these adjustments would invite adverse consequences for the Commission's broadband goals.

B. Phase I Connect America Fund Support Should Be Made Available for Pre-Existing Deployment Plans in Certain Cases.

In fleshing out its plans for the first phase of CAF, the Commission explains that its goal "is to increase broadband deployment in unserved rural and high-cost areas, not to fund existing facilities or deployment to which a carrier has already committed to federal or state regulators." <sup>196</sup> In keeping with this goal, the Commission seeks comment on whether it should explicitly limit Phase I funding to "new," or incremental, capacity or deployment to which the carrier has not already committed . . . ." <sup>197</sup>

U.S. Cellular objects to the Commission's overall goal regarding Phase I funding. Given the fact that Phase I is intended to be a transitional phase to a permanent CAF mechanism that will be designed to accomplish the Commission's proposed principle of using universal service

<sup>&</sup>lt;sup>194</sup> Notice at para. 276.

<sup>&</sup>lt;sup>195</sup> *Id.* at para. 275.

<sup>&</sup>lt;sup>196</sup> *Id.* at para. 308.

<sup>&</sup>lt;sup>197</sup> *Id*.

support to bring affordable broadband to *all* Americans, and the fact that the Commission proposes to adhere to a strict budget for Phase I funding, it would be more productive and cost-effective to use Phase I funding, at least in part, to support ongoing and planned projects, rather than restricting funding to new, start-from-scratch projects in currently unserved areas. One reason for this is that the high up-front costs associated with new projects would lead to the likelihood that more money would be spent to achieve less coverage, under the Commission's approach, than would be accomplished if ongoing and planned projects were funded in the first phase of CAF. <sup>198</sup>

If the Commission nonetheless does choose to restrict Phase I CAF funding to new, or incremental, capacity and deployments for which no commitments have previously been made, then U.S. Cellular suggests that the Commission should make at least one exception to this funding plan. Specifically, an exception should take into account, and ameliorate, the effects of the interim cap on competitive ETCs' high-cost support. The ongoing imposition of the cap in many cases has interfered with the ability of wireless carriers to meet network deployment commitments made to state regulatory commissions. These effects of the interim cap—which are products of the Commission's regulatory actions that are obviously beyond the control of the wireless competitive ETCs—should not be compounded by the Commission by using these pre-existing deployment commitments as a basis for making these competitive ETCs ineligible for Phase I CAF support.

\_

<sup>&</sup>lt;sup>198</sup> See, e.g., MTPCS, LLC, d/b/a Cellular One Comments, WT Docket No. 10-208 (filed Dec. 16, 2010), at 2 (arguing that funding underserved areas "enables broadband upgrades to existing infrastructure, and minimizes the time-consuming and costly acquisition, zoning and construction process for new sites. The result will be faster deployment of upgraded services.").

C. The Commission Should Establish Simple and Practical Criteria for Designating Geographic Areas That Will Receive Phase I Connect America Fund Support.

The Commission proposes to use census blocks as the basis for bidding in Phase I reverse auctions. Under this approach, the Commission would permit bidders to aggregate census blocks as part of a package bid to cover larger areas. <sup>199</sup> "Winning bidders would . . . be awarded support in one or more census blocks."

U.S. Cellular supports the Commission's proposal to use unserved housing units as the basis for determining the baseline number of unserved units in a census block.<sup>201</sup> The Commission also seeks comment regarding whether to consider unserved businesses or community anchor institutions in determining the number of unserved units in each census block to be used for assigning support. U.S. Cellular suggests that the Commission should not expand the definition of unserved units to include businesses or community anchor institutions.

Considering factors other than unserved housing units<sup>202</sup> for purposes of identifying unserved units would introduce levels of complexity and confusion that the Commission would be wise to avoid. Universal service policies relating to the deployment of telecommunications ser-

A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall.

<sup>&</sup>lt;sup>199</sup> *Notice* at para. 293.

<sup>&</sup>lt;sup>200</sup> *Id.* As U.S. Cellular has discussed, one issue involves whether the Commission's proposal to provide support on the basis of census blocks or aggregations of census blocks would be consistent with Section 214(e)(5) of the Act. See Section IV.B., *supra*.

<sup>&</sup>lt;sup>201</sup> *Notice* at para. 295.

<sup>&</sup>lt;sup>202</sup> The Commission proposes to use the U.S. Census Bureau definition of a "housing unit":

U.S. Census Bureau, State and County QuickFacts, Housing Units, http://quickfacts.census.gov/qfd/meta/long\_HSG010209.htm, *cited in Notice* at para. 129.

vices have typically focused on the statutory mandate to bring these services "to all the people of the United States . . ."<sup>203</sup> Defining unserved units in terms of housing units, which appears to be a reasonable surrogate for population, would be in keeping with this traditional focus.

In U.S. Cellular's view, it would make sense to steer clear of any attempt to tailor the disbursement of support based on factors other than population, or a surrogate for population. It would be difficult to measure these additional factors, and to determine appropriate coverage comparisons among different types of factors. Constructing and maintaining a regulatory regime to make these measurements and comparisons would be cumbersome, and the effort would not seem to be worth the candle. In addition, taking any additional factors into account could also detract from what should be the main task: expanding broadband coverage "to all the people."

D. Rural Carriers Should Be Required To Disaggregate Support Within Existing Study Areas.

The Commission proposes to require rural carriers to disaggregate support within their existing study areas beginning in 2012. <sup>204</sup> U.S. Cellular strongly supports this proposal.

As former Commission Chief Economist Rogerson has explained, the Commission currently considers the entire study area of an incumbent LEC to be a single region for purposes of providing per-line support payments.<sup>205</sup> Professor Rogerson points out that the problem is that a typical study area for an incumbent LEC receiving high-cost support "is generally far from homogenous and instead may contain areas with medium-sized towns or major highways where

<sup>&</sup>lt;sup>203</sup> 47 U.S.C. § 151.

<sup>&</sup>lt;sup>204</sup> *Notice* at para. 375.

<sup>&</sup>lt;sup>205</sup> U.S. Cellular Comments, WC Docket Nos. 05-337, 03-109, 06-122, 04-36, CC Docket Nos. 96-45, 99-200, 96-98, 01-92, 99-68 (filed Nov. 26, 2008), App. A, William P. Rogerson, "An Economic Analysis of Universal Service Payments to Wireless Carriers" (Nov. 26, 2008) ("Rogerson Nov. 2008 Paper") (prepared at the request of U.S. Cellular), at 12.

provision of wireless service may be profitable without support payments and more remote less densely populated areas where provision of wireless service is much less likely to be profitable without support payments."<sup>206</sup>

From the perspective of wireless carriers, Professor Rogerson has noted that "a natural approach for the Commission to consider in order to better target its support would be to disaggregate high cost support for wireless carriers." Under this approach, "the Commission should consider subdividing high cost areas into smaller sub regions, and making the per line support payment that a wireless carrier receives depend on the sub region that the service is being provided in."

Professor Rogerson's analysis is consistent with the Commission's observation that "disaggregation could also reduce existing competitive ETC support by better identifying only those areas that do require support to provide services." Even though requiring disaggregation "would not alter the total amount of support that an incumbent LEC would receive in a given study area[,]" the requirement would be a useful means of targeting support more directly to the areas with greatest need because it would "provide direct and automatic incentives for wireless carriers to build out facilities and increase the level of service they provide in sub regions of high cost areas that are most in need of additional facilities." <sup>211</sup>

<sup>&</sup>lt;sup>206</sup> *Id.* at 12-13.

<sup>&</sup>lt;sup>207</sup> *Id.* at 13.

<sup>&</sup>lt;sup>208</sup> *Id*.

<sup>&</sup>lt;sup>209</sup> *Notice* at para. 375.

<sup>&</sup>lt;sup>210</sup> *Id*.

<sup>&</sup>lt;sup>211</sup> Rogerson Nov. 2008 Paper at 14.

With regard to the processes to be followed by carriers that would be subject to the Commission's proposed disaggregation requirement, U.S. Cellular favors the self-certification procedure described by the Commission. This approach would be an efficient means of accomplishing disaggregation, and would not threaten anti-competitive results because of the safeguards the Commission would apply, *e.g.*, an incumbent would be required to file publicly available information with USAC regarding the incumbent's disaggregation plan, the incumbent would also be required to supply maps that would be available for public inspection, and the self-certification plan would be subject to challenge by interested parties. <sup>213</sup>

E. The Commission Should Begin the Process of Redrawing Existing Study Areas To Create More Narrowly Targeted Service Areas for Purposes of Connect America Fund Support.

In addition to its proposal regarding disaggregation within existing study areas, the Commission seeks comment regarding whether it should, in the near term, initiate a process to redraw incumbent LECs' study areas for purposes of determining eligibility for support in the second phase of CAF.<sup>214</sup> U.S. Cellular supports such an approach.

The Commission should take appropriate steps to encourage state regulatory commissions to establish new study area boundaries aimed at designing more narrowly targeted service areas for purposes of disbursing ongoing universal service support pursuant to Phase II of CAF. Such an exercise would benefit rural consumers by more narrowly targeting support to areas with

<sup>&</sup>lt;sup>212</sup> See Notice at para. 379.

<sup>&</sup>lt;sup>213</sup> *See id.* at paras. 381-382.

<sup>&</sup>lt;sup>214</sup> *Id.* at para. 384.

the highest costs.<sup>215</sup> Further, it may be appropriate for the Commission to adopt minimum federal criteria for new CAF support areas,<sup>216</sup> but U.S. Cellular would encourage the Commission to initiate a rulemaking for this purpose, in which the Commission could propose and seek comment on specific criteria.

U.S. Cellular also agrees with the Commission that the current manner in which ETC obligations apply may not optimize the targeting of support to the areas most in need of support.<sup>217</sup> Over the longer term, the resizing of study areas should help to address this problem. During the interim, however, U.S. Cellular supports an option suggested by the Commission that would permit ETCs to seek regulatory approval to modify their ETC designations "to cover only a portion of the geographic area they currently serve today . . . ."<sup>218</sup>

Finally, the Commission seeks comment on proposals, such as one made by the National Cable and Telecommunications Association ("NCTA"), to carve out of study areas the portions that states determine do not need support due to the presence of unsubsidized competition. <sup>219</sup> U.S. Cellular opposes the mechanism suggested by NCTA in its petition.

<sup>&</sup>lt;sup>215</sup> U.S. Cellular also agrees with CTIA that, in some cases, it would be advisable to consolidate smaller study areas that are under common ownership, because doing so would "reduce unnecessary support." CTIA July 2010 Comments at 19, *cited in Notice* at para. 385.

<sup>&</sup>lt;sup>216</sup> Notice at para. 384.

<sup>&</sup>lt;sup>217</sup> See id. at para. 387 (footnote omitted) (noting that "[c]urrent ETC obligations apply throughout a designated service area regardless of whether support is actually provided to an ETC operating within the designated service area").

<sup>&</sup>lt;sup>218</sup> *Id*.

<sup>&</sup>lt;sup>219</sup> *Id.* at para. 385 (citing NCTA, Reducing Universal Service Support in Geographic Areas that are Experiencing Unsupported Facilities-Based Competition, Petition for Rulemaking, GN Docket No. 09-51 and WC Docket No. 05-337 (filed Nov. 5, 2009) ("NCTA Petition")).

While U.S. Cellular agrees that current USF support mechanisms for rural incumbent LECs may contribute to growth in the size of the high-cost mechanism, <sup>220</sup> the NCTA proposal <sup>221</sup> is not a viable means of addressing this problem. As RCA has explained, in its thorough critique of the NCTA Petition, NCTA's proposal would fail to advance universal service and competitive goals in numerous respects, including the fact that it would threaten the delivery of service in the highest-cost portions of study areas. <sup>222</sup> RCA also demonstrates that NCTA's proposal would not likely generate any significant reductions in the size of the high-cost support mechanism, <sup>223</sup> and that the proposal would require a cumbersome and burdensome Commission review process. <sup>224</sup>

The difficulties presented by any proposal to restrict or eliminate USF support in areas in which there purportedly is unsubsidized competition lead to the conclusion that there are better ways to efficiently target support to areas with the greatest need. As U.S. Cellular has discussed, disaggregation within study areas, and the re-sizing of study areas, are two effective options to achieve this result.

<sup>&</sup>lt;sup>220</sup> See NCTA Petition at 3.

<sup>&</sup>lt;sup>221</sup> Under NCTA's proposal, parties could file petition seeking to show that unsubsidized wireline competitors offer service to more than 75 percent of households in a study area (or to more than 50 percent of households in certain cases, if the petitioner cannot meet the 75 percent test), or that a state has found sufficient competition to substantially deregulate the retail rates charged by the incumbent LEC. If the petitioner makes either of these showings, then the high-cost funding recipient has the burden of demonstrating the minimum amount of support necessary to ensure that non-competitive portions of the study area will continue to be served. *Id.* at 17-20.

<sup>&</sup>lt;sup>222</sup> RCA Comments, GN Docket No. 09-51, WC Docket No. 05-337, RM-11584 (filed Jan. 7, 2010), at 5.

<sup>&</sup>lt;sup>223</sup> *Id.* at 11-12.

<sup>&</sup>lt;sup>224</sup> *Id.* at 12-15.

## IX. THE COMMISSION'S PROPOSED LONG-TERM VISION FOR THE CONNECT AMERICA FUND IS FLAWED BY A MYOPIC RETREAT FROM COMPETITIVE NEUTRALITY.

U.S. Cellular is concerned that several of the proposals the Commission plans to consider in connection with adopting ongoing support mechanisms, for use in the second phase of CAF, would seriously erode the ability of wireless competitive ETCs to meet consumer expectations that mobile broadband networks, providing high-speed Internet access through the use of the most advanced technologies, will be accessible in rural and high-cost areas. U.S. Cellular discusses these concerns in the following sections.

A. The Commission's Proposal To Fund Only One Broadband Provider in a Geographic Area Is a Throwback to the Days of Regulated Monopolies.

The Commission seeks comment on the NBP recommendation that "there should be at most one—whether fixed or mobile—subsidized provider of broadband service per geographic area . . ."<sup>225</sup> The Commission's intentions in considering this recommendation are laudatory: The Commission suggests that the recommended approach will advance its objectives to maximize the reach of available funds to extend broadband, and to control the size of the Fund. <sup>226</sup> The recommendation, however, is problematic.

U.S. Cellular has presented arguments in these Comments that restricting universal service support to not more than one provider in a service area (through the use of single-winner reverse auctions) would not be competitively neutral.<sup>227</sup> Any proposal to restrict universal service support to a single provider in a service area cannot be squared with the judicial interpretation that USF support mechanisms, *in order to comply with the Act*, must not only be sufficient

<sup>&</sup>lt;sup>225</sup> Notice at para. 402 (citing NBP at 145).

<sup>&</sup>lt;sup>226</sup> *Id.* at para. 403.

<sup>&</sup>lt;sup>227</sup> See Sections III.A.3., V.A., *supra*.

to preserve and advance universal service, but also must be competitively neutral. The *Alenco* court stressed that:

The [USF funding] program must treat all market participants equally—for example, *subsidies must be portable*—so that the market, and not local or federal government regulators, determines who shall compete for and deliver services to customers. . . . [T]his principle is made necessary not only by the economic realities of competitive markets *but also by statute*. <sup>228</sup>

The Broadband Plan recommendation does not provide for the portability of USF support, and therefore fails to comply with the Act. As U.S. Cellular has explained, this recommended approach would install a dominant carrier in service areas, supported by USF funds and insulated from competition, forcing the Commission to construct a regulatory superstructure intended to check anti-consumer and anti-competitive incentives of the dominant provider. <sup>229</sup>

The Commission presumably is of the view that, if it uses single-winner reverse auctions to disburse high-cost and CAF support, it will accomplish competitive neutrality because all auction participants would be treated fairly and the auction would produce a market-driven level of funding. Even assuming *arguendo* that there is any basis for these assumptions and expectations, they are not relevant to the requirement articulated in *Alenco*. The Act contemplates and requires universal service mechanisms that work in tandem with, rather than conflict with, the competitive operation of markets. A single-winner reverse auction—or any other mechanism that limits USF support to a single provider in a service area—cancels out the competitive operation of markets.

<sup>&</sup>lt;sup>228</sup> *Alenco*, 201 F.3d at 616 (emphasis added).

<sup>&</sup>lt;sup>229</sup> See Section V.A.1., *supra*.

A further problem with the NBP recommendation is that, even if these statutory requirements could somehow be shelved, there is little reason to conclude that restricting support to one provider is necessary to advance the Commission's goals. With regard to the Commission's goal of maximizing the reach of funding to extend broadband services, the recommendation would risk undercutting this goal by reducing incentives for private investment to deploy broadband in rural and high-cost areas. U.S. Cellular (and many other competitive ETCs) utilize universal support to supplement their own investments in deploying mobile networks. In many cases, the availability of high-cost support plays a critical role in facilitating business decisions to construct cell sites and undertake other network expansion. By shutting off this support, the NBP recommendation would likely curtail private investment. Doing so could hardly serve the Commission's goal of maximizing the reach of funding to aid in the deployment of broadband networks.

In addition, limiting support to not more than one carrier in a service area is not necessary to control the size of funding mechanisms. The Commission can use other means to accomplish this objective. In addition to transitioning rural incumbent LECs from an embedded cost disbursement mechanism to mechanisms that create better incentives for efficient operations, and in addition to reforming universal service contribution requirements to expand the base of contributors, the Commission has an effective device readily at hand: the portability of funding. If the Commission required all disbursements to rural incumbent LECs, and to competitive ETCs, to be fully portable, <sup>230</sup> then the receipt of universal service support by market entrants would not increase the size of funding mechanisms. <sup>231</sup>

--

<sup>&</sup>lt;sup>230</sup> Currently, competitive ETC high-cost funding is portable, but rural incumbent LEC funding is not.

<sup>&</sup>lt;sup>231</sup> The Commission has long supported the portability of universal service funding. *See USF First Report and Order*, 12 FCC Rcd at 8788 (para. 19) (emphasis added) (finding that "universal service [should] be sustainable in a competitive environment; this means both that the system of support must be competitive-

Finally, the Commission seeks comment on proposals to support both fixed and mobile networks under CAF, rather than funding only one provider in any given service area.<sup>232</sup> U.S. Cellular supports the availability of separate funding for fixed and mobile broadband services, and has advanced its own proposal for doing so.<sup>233</sup> For the reasons U.S. Cellular has discussed in these Comments, it opposes the use of reverse auctions as a means of providing disbursements under these mechanisms, or any requirement limiting support under these mechanisms to one provider per geographic area (or to one wireline and one mobile provider per area).

B. The Commission's Proposal To Cap the Phase II Connect America Fund Support Mechanism Would Undermine the Achievement of Universal Service Goals.

The Commission seeks comment on the following proposal for a funding cap for the second phase of CAF:

[S]et an overall budget for the CAF such that the sum of the CAF and any existing high-cost programs (however modified in the future) in a given year are equal to the size of the current high-cost program in 2010. 234

Although the Commission points to its discretion to impose cost controls to avoid excessive Fund expenditures, <sup>235</sup> U.S. Cellular would caution the Commission that possessing this authority does not mean that exercising it is a good idea.

ly neutral and permanent and that *all support* must be targeted as well as *portable* among eligible tele-communications carriers"). *See* U.S. Cellular Comments, WC Docket No. 05-337, CC Docket No. 96-45 (filed Apr. 17, 2008), at 14 (emphasis in original) (observing that "[t]he Commission's real concern about overall fund size can be easily resolved by carrying out the agency's intent to fully implement its statutory mandate to make all support *fully portable among all carriers, not just competitive ETCs*").

<sup>&</sup>lt;sup>232</sup> *Notice* at para. 403 (citing proposals made by AT&T and RCA).

<sup>&</sup>lt;sup>233</sup> See Section III.C., *supra*.

<sup>&</sup>lt;sup>234</sup> *Notice* at para. 414.

<sup>&</sup>lt;sup>235</sup> *Id.* at para. 412.

There are several problems with the Commission's proposal. *First*, the Commission does not make its case regarding the need for an overall cap. The Commission projects that the size of the high-cost program this year will be approximately \$4.3 billion (roughly the same as last year), <sup>236</sup> but it provides no empirical evidence, and no reasoned analysis, regarding why this level of funding necessitates a funding cap. Interested parties are provided with no detailed explanation of why the Commission may believe that this level of funding could threaten the adoption of broadband by consumers <sup>237</sup> or could threaten the "sustainability" of the Fund. Interested parties are left to guess at the Commission's reasons for its tentative view that an up-front and permanent cap is necessary.

Second, the Commission could avoid any need for a permanent cap on Phase II CAF support by acting on universal service contribution reform. U.S. Cellular has previously advocated that "effective universal service reform must extend to reforming the methodology pursuant to which consumers contribute to the fund[,]" and that, [w]ith interstate and international revenues continuing to fall, reform that spreads the contribution burden across all users of the networks that will benefit by USF investments must be undertaken so that the NBP goals can be achieved." An up-front, permanent cap on universal service support has serious negative im-

<sup>&</sup>lt;sup>236</sup> *Id.* at para. 414.

<sup>&</sup>lt;sup>237</sup> The Commission asserts "that American consumers and businesses ultimately pay for USF, and that this contribution burden may undermine the benefits of the program by discouraging adoption[,]" *id.* at para. 10, but it provides no analysis to provide any foundation for this concern.

 $<sup>^{238}</sup>$  U.S. Cellular July 2010 Comments at 6, n.13.

<sup>&</sup>lt;sup>239</sup> *Id.* Quarterly telecommunications revenues have declined nearly 12 percent in the last two years (from the first quarter 2009 through the first quarter 2011 (estimated)), and telecommunications revenues dropped by more than 4 percent in the fourth quarter 2010. Ex Parte Letter from Michael R. Romano, Senior Vice President – Policy, National Telecommunications Cooperative Association, to Marlene H. Dortch, Secretary, FCC (filed Jan. 27, 2011), Enclosure, "USF Contribution and Distribution: Fiction and Facts," at 3.

plications for the Commission's ability to provide sufficient funding to meet its goals for broadband deployment throughout rural America. In light of these implications, it is extraordinary that the Commission has chosen to propose such a cap while leaving on the sidelines any consideration of contribution reform.

Third, the Commission should place more reliance on its own representations regarding the effectiveness of its proposed universal service reforms. For example, the Commission has indicated that "[w]e believe that our proposals to rationalize investment in modern communications networks, to better target support, and to employ market-based mechanisms will control costs and thereby control the contribution burden borne by consumers." <sup>240</sup> If the Commission is correct, then there would be no need for an up-front cap on overall support. It would seem prudent for the Commission to adopt a package of reforms and then monitor their effects before making any decisions regarding the need for an overall cap.

And, *fourth*, an up-front cap would be fundamentally at odds with President Obama's commitment to "invest in the next generation of high-speed wireless coverage for 98 percent of Americans." More than a decade ago the Commission, in confronting the issue of balancing its universal service mandate with its obligation to avoid undue burdens on carriers and consumers, articulated this approach:

Because increased federal support would result in increased contributions and could increase rates for some consumers, we are hesitant to mandate large increases in explicit federal support for local rates in the absence of clear evidence that such increases are necessary either to preserve universal service, or to protect

... **F** 

<sup>&</sup>lt;sup>240</sup> *Notice* at para. 487.

<sup>&</sup>lt;sup>241</sup> President Obama Remarks at 8.

affordable and reasonably comparable rates, consistent with the development of efficient competition. <sup>242</sup>

The Commission thus concluded that even large increases in the size of the Fund can be justified if they are necessary to meet statutory goals. In U.S. Cellular's view, consumers in rural America would be better served by the balancing the Commission undertook in the *USF Seventh Report and Order*, rather than the approach proposed in the *Notice*. It would seem incongruous to begin the pursuit of President Obama's commitment by imposing a cap on universal service support.

While deciding to propose an overall CAF cap, the Commission does acknowledge that, "[o]n the other hand, . . . high costs [are] required to deploy ubiquitous mobile coverage and very-high-speed broadband to every American[,]"<sup>243</sup> and asks "whether additional investments in universal service may be needed to accelerate network deployment."<sup>244</sup> In assessing whether additional investments are needed, it is useful to recall that the Broadband Plan estimates a broadband availability gap of \$24.3 billion, <sup>245</sup> and concludes that:

Closing the broadband availability gap and connecting the nation will require a substantial commitment by states and the federal government alike. This commitment must include initial support to cover the capital costs of building new networks in areas that are unserved today, as well as ongoing support for the operation of newly built networks in areas where revenues will be insufficient to cover ongoing costs. <sup>246</sup>

The Commission should pursue this substantial commitment by devising means of providing additional funding, rather than proposing an overall cap on funding.

<sup>&</sup>lt;sup>242</sup> USF Seventh Report and Order, 14 FCC Rcd at 8111-12 (para. 69), quoted in RCA Jan. 2010 Comments at 14.

<sup>&</sup>lt;sup>243</sup> *Notice* at para. 414.

<sup>&</sup>lt;sup>244</sup> *Id*.

<sup>&</sup>lt;sup>245</sup> NBP at 137, Exhibit 8-B.

<sup>&</sup>lt;sup>246</sup> *Id.* at 139.

If the Commission nonetheless decides to impose a cap, then U.S. Cellular suggests that the baseline for the cap should be subject to a quarterly annual inflation adjustment.<sup>247</sup> Providing for an inflation adjustment would not likely undermine the policy objectives that might lead the Commission to impose a cap, but would make some amount of additional funding available to assist in meeting the Commission's commitment for broadband deployment.

The Commission also asks what factors it should consider in "sizing" CAF.<sup>248</sup> Of the various "levers that could impact the level of financial commitment required from the federal universal service fund to achieve [the Commission's] goals," U.S. Cellular believes that the most important are the affordability of voice and broadband services, and service and rate comparability. The Commission should arrive at affordability and comparability definitions that will best serve consumers in rural and high-cost areas, and then determine the level of support that may be required to achieve affordability and reasonable comparability, based on these definitions.

The Commission also notes that whether it funds more than one network per area is one of the levers to be considered in sizing CAF, presumably because the Commission anticipates that funding more than one network would drive up the size of CAF. As U.S. Cellular has explained, however, the Commission could avoid any upward pressure on the size of CAF by requiring the full portability of support among funding recipients in a given service area.

Finally, the Commission asks for comment on whether it should be focused on sizing CAF to ensure that the total universal service program, not just the high-cost program, remains at

<sup>&</sup>lt;sup>247</sup> See Notice at para. 414.

<sup>&</sup>lt;sup>248</sup> *Id.* at para. 415.

<sup>&</sup>lt;sup>249</sup> *Id*.

<sup>&</sup>lt;sup>250</sup> See Section IX.A., *supra*.

its current size.<sup>251</sup> If the Commission finds it necessary to impose an up-front CAF cap, the cap should not be extended to other support programs (*i.e.*, the low income, schools and libraries, and rural health care programs), but instead should be limited to the high-cost program. These other programs are important to achieving the goals of universal service, and, therefore, should not be subject to a restrictive cap.

C. Instead of Choosing Between the Less Problematic of Two Flawed Options for Distributing Phase II Connect America Fund Support, the Commission Should Rely on a Cost Model.

The Commission proposes two approaches for targeting and distributing CAF funding in the long term. First, the Commission proposes to use a competitive bidding mechanism to award funding to one provider per geographic area in all areas designated to receive CAF support. Alternatively, the Commission seeks comment on an approach under which, in each service area, the Commission would offer the current COLR for voice services (*i.e.*, most likely a wireline incumbent LEC) the opportunity to exercise a "right of first refusal" to provide both voice and broadband services to customers in the area for a specific amount of ongoing support. <sup>253</sup>

As a general matter, U.S. Cellular opposes any use of reverse auction mechanisms for the disbursement of CAF support.<sup>254</sup> As U.S. Cellular has discussed, the use of a forward-looking economic cost model, which targets support to high-cost areas and identifies an amount of funding that is fully portable, would serve more effectively to preserve and advance universal service.<sup>255</sup>

<sup>&</sup>lt;sup>251</sup> *Notice* at para. 416.

<sup>&</sup>lt;sup>252</sup> *Id.* at para. 418.

<sup>&</sup>lt;sup>253</sup> *Id.* at para. 431.

<sup>&</sup>lt;sup>254</sup> See Sections IV.A., V., *supra*.

<sup>&</sup>lt;sup>255</sup> See Section V.C.. *supra*.

Faced with the Commission's two alternatives, however, U.S. Cellular suggests that the Commission should not pursue the ROFR option. Such an approach would not be market-driven under any formulation, and thus would be out of step with the Commission's efforts to devise disbursement mechanisms that will serve to replicate, in some fashion, the workings of market forces.

Moreover, as U.S. Cellular has discussed, the ROFR alternative would shut off access to universal service support for providers of mobile broadband services in service areas that would become the exclusive territory of the incumbent LECs who choose to exercise the ROFR option. Such an outcome would conflict with the Commission's goal of accelerating deployment of mobile broadband networks. The ROFR alternative also would not be competitively neutral, because it would inhibit competitive entry and provide a source of funding to rural incumbent LECs (*i.e.*, direct election of funding) that would not be available to competitive ETCs. 257

## X. CONCLUSION.

U.S. Cellular respectfully urges the Commission to design universal service support mechanisms, and to develop a transition for the implementation of those mechanisms, in a manner that focuses on several key objectives. In keeping with the phenomenal level of consumer demand for mobile broadband services, the Commission's modernized universal service mechanisms should give priority to bringing mobile broadband to consumers throughout the Nation.

The Commission also should redirect its efforts to the task of ensuring that its support mechanisms work in harmony with the goal of capturing the benefits that competitive markets are capable of providing to consumers in rural and high-cost markets. One important step in this

<sup>&</sup>lt;sup>256</sup> See Section II.A., *supra*.

<sup>&</sup>lt;sup>257</sup> See Section III.A.3., *supra*.

direction would be for the Commission to abandon its reverse auction experiment, and to rely instead on a forward-looking economic cost model as the mechanism for disbursing CAF support. Another important step would be for the Commission to apply, rather than dismantle, its principle of competitive neutrality as it designs and implements its new funding mechanisms.

Finally, the Commission should place greater reliance on the effectiveness of its various reform proposals to control overall growth in the size of the Fund, thus eliminating any need to impose up-front caps on the Fund.

Respectfully submitted,

UNITED STATES CELLULAR CORPORATION

By:\_\_\_\_\_

David A. LaFuria John Cimko

Contileir

LUKAS, NACE, GUTIERREZ & SACHS, LLP 8300 Greensboro Drive, Suite 1200 McLean, Virginia 22102 (703) 584-8678

Grant B. Spellmeyer
Senior Director - Legislative &
Regulatory Affairs
UNITED STATES CELLULAR CORPORATION
8410 West Bryn Mawr
Chicago, Illinois 60631
(773) 399-4280

April 18, 2011